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ECONOMIC REHABILITATION

IN

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[Title page]

FOREWORD

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Resolution 83 of the UNRRA Council authorizes and requests the United Nations Relief and Rehabilitation Administration "to furnish to the United Nations reports on the work of the Administration and the progress made towards economic rehabilitation in the countries assisted by the Administration".

This paper is the forty-eighth of a series which has been prepared by the Division of Operational Analysis, UNRRA European Regional Office. The papers are based mainly on information received from UNRRA Missions and from the Governments to which they are accredited. Economic Rehabilitation in Byelorussia was written by Mary Redmer. Acknowledgement is made to V.I. Volpert for assistance in checking and in supplying statistics; to S.N. Gupta for work on the preliminary draft; and to the UNRRA Mission to Byelorussia for basic material. A complete list of Operational Analysis Papers already issued appears at the end of this paper.1

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1 [This list has not been included with the Source -- Analyst]

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I INTRODUCTION

131 The Byelorussian Soviet Socialist Republic is situated on the western border of the U.S.S.R. between the upper and middle reaches of the Rivers Dnieper, Bug, and Western Dvina. The area of the Republic is about 89,000 square miles; and in October 1939 its population was estimated at 10,386,000 inhabitants; the capital city is Minsk. Approximately a quarter of the territory consists of valuable coniferous (pine and fir) and deciduous (oak and aspen) forests. The climate is mild and humid; and beneath the soil lie large deposits of peat, phosphorites, fire-proof, acid-proof and porcelain clay, marl, sand for glass making, and bituminous shale.

642 The B.S.S.R. was proclaimed on January 1, 1919. In 1922, together with the other Soviet Republics, it formed one of the constituent Republics of the U.S.S.R.

At the Republican level, its government consists of a Council of Ministers and the Byelorussian Supreme Soviet (the legislative assembly of the Republic). At the Federal level, it has representatives in the Supreme Soviet of the U.S.S.R., which is divided into two chambers having equal legislative power: the Soviet of Union elected on the basis of one member for every 300,000 of population; and the Soviet of Nationalities, elected on the basis of 25 deputies from each Union Republic, 11 from each Autonomous Republic, five from each Autonomous Region, and one deputy from each national area. Also at the Federal level are the Council of Ministers of the U.S.S.R. - the highest organ of executive and administrative power - and the Supreme Court of the U.S.S.R.

648 Each Republic has the right to enter into relations with foreign states and to conclude treaties with them; but foreign affairs concerning the interests of the Union as a whole are dealt with by the Ministry of Foreign Affairs of the U.S.S.R. Certain of the ministries - for example, the Ministry of Foreign Trade - are the exclusive prerogative of the Union Government. Others exist both at the Union level and in the individual republics; and a number exist only in the republics.

631 For administrative purposes the Byelorussian Republic is divided into thirteen "oblasts", or provinces, which in turn are subdivided into raions, or counties. Oblasts and raions are not necessarily uniform in size and population, but vary according to the concentration of industry, or for administrative convenience.

871 Between its inception in 1919 and the outbreak of war in 1941, the B.S.S.R. had made substantial progress in all directions. Universal education had been introduced, and over a million children attended school. Before the war the Republic had 23 higher educational institutions, a large number of technical schools, and 30 scientific research institutes headed by the Academy of Science.

438 A large-scale industry had developed. In place of the semi-handicraft workshops which predominated in the old days, large modern
433 factories arose. The timber industry was modernized and developed for increased production of prefabricated dwellings, paper, cardboard, matches, chemical products, and artificial silk. Industries, such as meat-packing, starch and treacle, distilling, dairy produce, tanning, and flax, were highly developed. The mineral resources of the country served as a basis for the building up of the pottery, glass, cement, and similar industries. The engineering plants in Byelorussia turned out machine tools, agricultural machinery and peat-cutting machinery. The extraction of peat was conducted on an extensive scale.

433 After the Revolution, agriculture in Byelorussia also underwent
241 a fundamental change. The individual peasants united in collective
474 farms (kolkhozes) in which they jointly cultivated the soil and had their co-operative dairy farms, piggeries, poultry runs, and beehives. They received substantial assistance from the state in the form of financial credits, tractors, harvester combines, and other agricultural machinery, seeds, equipment for draining marsh-lands, and innumerable other kinds of assistance. Under the Soviet system the cultivated areas of Byelorussia increased considerably, and in 1937 exceeded that of 1913 by 35 per cent.

Area and Population

Area

131 The present area of the Byelorussian Republic is about 226,300 square kilometres. Nearly half of this territory was added in September 1939 when, after the collapse of the Polish State, Western Byelorussia, which had been seized by Poland in 1920, was rejoined to the B.S.S.R. as part of the Soviet Union. The area of this region was 108,000 square kilometres, and the population, 4.8 millions. Of this added territory, 35.5 per cent. was classified as arable, 23.5 per cent. as forests, 24 per cent. as pastures and meadows, and 1.5 per cent. as gardens and orchards.

In August 1940 the area of Byelorussia decreased somewhat when parts of the Vileika and the Baranovichi provinces were transferred
[728] from the B.S.S.R. to the Lithuanian Soviet Republic. Another small decrease occurred after the war in Europe had ended; in August 1945 a treaty was signed between Poland and the U.S.S.R., adjusting the Soviet-Polish frontier roughly along the "Curzon Line", with some deviations in Poland's favour. In consequence of this, Poland received a small strip of the territory which had been previously incorporated in the B.S.S.R., including the largest town of Western Byelorussia, Bialystok.

Population

162 At the census of January 1939 the population of the B.S.S.R. was 5,567,976 (an increase of 11.7 per cent. over December 1926, when the

3/2 [Between 1919 and 1941 -- Analyst]

162 inhabitants numbered 4,983,240). The greatest increase had occurred in the towns, largely as a result of the growth of industry. From 1926 to 1939 the urban population of the B.S.S.R. rose from 847,330 to 1,372,522; while the numbers of rural inhabitants remained almost constant: 4,135,410 in 1926 as compared with 4,195,454 in 1939.

In the Soviet Union as a whole, the population had increased by 15.9 per cent., from 147 million in December 1926 to over 170 million in 1939. However, whereas the numbers living in towns had more than doubled (26 million to 55.9 million); the rural population had decreased from 120.7 million to only 114.5 million.

No census has been taken in the Soviet Union since the war; and the present population of the B.S.S.R. is not definitely known. In October 1939, after the incorporation of the ex-Polish regions, it was about 10,386,000 inhabitants.

The principal cities of Byelorussia with their 1939 populations are Minsk, the capital (238,772), Vitebsk (167,424), Gomel (144,169), Mogilev (99,440), and Bobruisk (84,107). As compared with 1926 the populations of all these towns had increased from 64 to 98 per cent. by 1939.

War Losses

721 927 On June 22, 1941, the German armies, supported by their satellites, attacked the Soviet Union on its 1,500-mile European front; and in the early phase of the war, succeeded in overrunning the western Soviet Republics of Byelorussia and the Ukraine. For the second time in this century these areas were subjected to German occupation and devastation.

Lying directly in the path of the enemy advance towards Moscow, the Byelorussian Republic experienced terrible destruction. Just one month after the initial Nazi attack, the German News Agency announced that the Byelorussian town of Vitebsk (which the Nazis, according to their claim, had captured on July 11), had been "nothing but ruins when 727 occupied". As the war progressed, this black statement was to be true of most Byelorussian cities. In August 1941, according to an estimate by Allen and Muratoff,[1] the Germans were employing half their Panzer divisions and at least 40 per cent. of all their available forces in the Vitebsk-Smolensk-Mogilev sector.

Even after the Soviet Army retreat, Byelorussia continued to be a battle ground as Soviet guerillas carried on heroic warfare against the enemy occupying forces.

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1 The Russian Campaigns of 1941-43, Allen and Muratoff, Penguin Books, London, 1944.

727 Byelorussia was not liberated until the summer of 1944; and the Ukraine even later, in November 1944. Both were in ruins. At the end of the war in Europe these two Republics were acknowledged to be the most devastated areas of all devastated Europe. Nowhere else had the destruction been carried out in so thorough a manner and on so wide a scale. Whole cities and villages were demolished; great industries wrecked; and farms pillaged and burned. Millions of Byelorussian and Ukrainian citizens had been made homeless, and were eeping in cellars, dugouts and caves.

Losses of population were enormous. Apart from army casualties, the numbered civilian dead in the two Republics was as much as 10 to 15 per cent. of the total populations. At the Minsk trial of German war criminals in January 1946, the indictment alleged that 2.2 million Soviet civilians and prisoners of war were exterminated in Byelorussia by the Germans. The indictment also declared that 380,000 people were driven from Byelorussia to Germany for forced labour. (Of those so deported, about 300,000 had been returned home by August 1946). Another estimate of lives lost in the war has been given by Mr. Ivan Tinchuck, the UNRRA member for the Byelorussian Republic, who stated that the Republic lost 1,386,000 persons (mostly women, children and old people). Most of these had been tortured and shot, hanged, burned or gassed to death. These figures do not include the Byelorussians in the Soviet Army who were battle casualties.

Some indication of the population losses and of the present population can be gathered from the fact that in the February 1946 elections, there were 4,043,284 voters in the B.S.S.R. out of the Soviet Union total electorate of 101,717,686. Thus the electorate of the B.S.S.R. was less than 4 per cent. of the total; whereas at the end of 1939 this Republic's population represented 5.3 per cent. of all the inhabitants of the entire Soviet Union. This year in Byelorussia the electorate attained to 4,435,919.

The material damage in Byelorussia was almost indescribable. The major cities had been destroyed, and 9,200 villages burnt. In them, the Germans had demolished over a million buildings, including state and cultural institutions, hospitals, schools, and dwellings. As a result of this destruction, three million people - nearly one-third of the population - lost all their personal belongings and their homes. Some indication of the destruction wrought in the towns is given in the following table.

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TABLE I

War Destruction of Byelorussian Towns

	Population 1939	Population June 1946	Estimated percentage destruction
Minsk	238,772		80
Vitebsk	167,424	62,000	90 - 93
Gomel	144,169		80
Orsha	62,000[1]	34,000	80
Polotsk	30,000[1]	24,000	96
Borisov	88,000[1]	43,000	50

1 Population in 1940, according to UNRRA Mission to Byelorussia.

Sources: Statement by Mr. Ivan Tinchuk, UNRRA Member for the B.S.S.R., August 1945; and UNRRA Mission to Byelorussia, Minsk.

According to the indictment of the Minsk trial of German war criminals, 1,136 hospitals, clinics and first aid centres were destroyed during the occupation. The civilian population received no medical services from the Germans during the war and the incidence of various diseases increased enormously. There was also a drastic increase in infant mortality.

Byelorussian industry has been systematically reduced to rubble. Everywhere the pattern of destruction was the same. Enterprises had been stripped of machinery, and the buildings burned or blown up. Stationary equipment was destroyed or rendered useless.

Agriculture and livestock breeding suffered equally. Millions of farm animals were slaughtered or taken to Germany. Ten thousand collective and state farms were plundered. From machine and tractor stations alone, 8,996 tractors and 1,105 combine harvesters were removed and taken to Germany. (By comparing these losses with the immediate pre-war numbers of 12,000 tractors and 1,600 combines, it can be seen what German occupation meant to mechanized farming in this Republic.)

The destruction of agriculture had severe consequences on the food situation. In May 1945 the Chief of the UNRRA Supplies Department in the Byelorussian Government stated that, while there was no actual [262] starvation, there was serious undernourishment in many areas. UNRRA Mission observers reported that at that time the large majority of the people had little to eat beyond bread, potatoes and UNRRA food. The shortage of fats and oils was particularly acute; in the spring of 1945 the daily fat ration in children's homes was only 20 grams, compared with 100 grams before the war.

727 Reckoned in terms of 1941 state prices, the direct damage inflicted on the Byelorussian S.S.R. by the German military attack and the prolonged occupation has been placed at 75,000 million roubles (15,000 million U.S. dollars). This includes material losses due to destruction, damage, and plunder; and it represents 11 per cent. of the damage to the entire Soviet Union, which has been estimated at 679,000 million roubles.

The following table shows how Byelorussia's war damage has been assessed to the separate branches of the economy.

TABLE II

War Damage to the Byelorussian Soviet Socialist Republic
(in million U.S. dollars)

Industry and building	1,263.84
Transport and communications	1,998.96
Housing and municipal economy	917.94
Agriculture	4,480.34
Commerce	141.22
Education	464.76
Arts	32.68
Public Health	122.12
State institutions	241.44
Co-operation	387.16
Public organizations	68.48
Religious communities	161.06
Personal property of citizens	4,720.00
Total	15,000.00

Note: Damage is estimated in terms of 1941 state prices: 75,000 million roubles, converted to dollars at the rate of 5 roubles equal one dollar. The present official rate is 5.40 roubles to the dollar.

Source: Statement by Mr. K.V. Kiselev, Minister of Foreign Affairs of the Byelorussian S.S.R., published in the Soviet Monitor, London, February 8, 1947.

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648 Rehabilitation work in the B.S.S.R. commenced even before the war was ended. Great assistance was given by other areas of the U.S.S.R., but so many of the economically important regions of the Soviet Union had suffered destruction that the help which they could provide was limited.

Early in 1945 it became apparent that both Byelorussia and the Ukraine would need further external assistance if they were to carry on

727 the full tasks of rebuilding homes, restarting industry, and working their
648 farms once more. Therefore, in the summer of 1945 the Soviet Government applied to UNRRA for such assistance and strongly urged that 700 million U.S. dollars be allocated by the Administration for relief work in these two Republics. In August 1945 the Ukraine and Byelorussia were admitted to membership in UNRRA; and on December 18, 1945, after it was determined that they were not in a position to pay with foreign exchange for their own import requirements, agreements were signed between their governments and the Administration providing for the delivery of relief and rehabilitation supplies amounting to 250 million dollars - little more than one-third of the amount requested.

The UNRRA agreement with Byelorussia provided that 61 million dollars would be used to ship food, clothing, medical, agricultural, and industrial supplies to the B.S.S.R. The agreement also stipulated that UNRRA would attempt to deliver the bulk of these supplies to Byelorussia before June 30, 1946; however, because of procurement and transport difficulties, this proved impossible. On May 30, 1946, therefore, the UNRRA-Byelorussian agreement was extended to the end of 1946.

On April 19, 1946, a small UNRRA Mission arrived in Byelorussia and established headquarters at Minsk. The duties of the Mission were to handle problems connected with the delivery of UNRRA supplies, to work closely with the Byelorussian Government in ascertaining the needs of the people, and to observe the distribution of UNRRA supplies. As in all UNRRA countries, the Mission members have complete freedom of movement and observation.

Before the arrival of the Mission at Minsk, 29 ships carrying UNRRA cargoes had already landed at Soviet ports (from December 1945, when UNRRA shipments started, up to April 23, 1946). The Byelorussian Government estimated the tonnage received at 67,680 gross long tons, of which 58,000 tons were food; 3,939 tons, seeds; 3,905 tons, industrial materials; and 1,512 tons were clothing, soap, leather, tarpaulins, and rope. The government also reported that they had taken from the ports and distributed all but 22,000 tons of the supplies received by that time.

Members of the UNRRA Mission making initial observations reported efficient and equitable distribution of the supplies to those sections of the population which suffered most from the war. Practical use was being made of every scrap of material, and there was no evidence of waste. As at April 23, 1946, 40,000 gross long tons of food had been distributed among 12 regions and eight individual towns in Byelorussia. Eleven locomotives had been distributed to nine different points; industrial metals - copper, aluminium, and zinc - had been distributed in six of the war destroyed cities; and over 1,000 tons of seeds, to seven regions of the Republic.

648 It was in food supplies that UNRRA was making its greatest con-
262 tribution. In all the shops, UNRRA food constituted the bulk of the supplies; and apart from bread, cereals, and potatoes, over 90 per cent.

648 262 of the Byelorussian diet came from UNRRA sources. Meat supplies from domestic production were almost nil; fats and oils also were critically short; and little sugar was available, the Byelorussian sugar industry having been completely smashed.

Spring 1946: The Outlook

000 In Byelorussia, 1946 was expected to be a great year for recovery. The new Five Year Plan had just been adopted; UNRRA assistance was getting into full swing; and the relief supplies were filling a wide gap. The food situation was poor but, thanks to UNRRA help, not desperate. Material progress was being made; destroyed houses were being rebuilt, and farming and industry slowly restored.

121 The following sections of this report will try to tell a little of the story of Byelorussia before the war; indicate the damage inflicted by the German invaders and consider Byelorussian reconstruction as it progresses today.

Long Term Rehabilitation Plans

727 185 On March 18, 1946, the Supreme Soviet of the U.S.S.R. adopted a series of measures for the long-term rehabilitation of the Soviet Union. Incorporated in the fourth Five Year Plan (1946-1950), these measures were designed to rehabilitate the devastated regions of the country, to recover the pre-war level in industry and agriculture, and then considerably to surpass that level.

Included in the Plan are provisions for capital investments in the Byelorussian Republic of 6,950 million roubles in 1946-50;[1] of this 2,422 million roubles are to be spent for works under the jurisdiction of the Republic. While small in comparison to the 75,000 million roubles estimated war damage suffered by the B.S.S.R., this volume of capital investments is greater than the combined expenditures of 5,741 million made during the three pre-war Five Year Plans, (1928-42). Although some allowance must be made for the lower value of the rouble, the physical goals themselves are also greater.

The new plan contemplates great expansion, but no marked changes in the direction of Byelorussian economic development. Agricultural production is to be revived; and by 1950 the crop area is to be 5,300,000 hectares. Industrial plans for 1946-50 are largely centered in the development of electric power, and peat, brick and other building materials, all of which were well established before the war. One significant trend is toward the construction of more hydro-electric stations, which in 1950 will produce 12 per cent. of the total power,

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[1] Capital investments for the whole Soviet Union in 1946-50 are fixed at 250,300 million roubles.

727 as compared to 1.6 per cent. in 1940. Peat briquette plants, pre-
185 fabricated housing manufacture, and food processing plants are also to be launched. Except for the planned construction of factories to produce tractors and motor trucks - and these will be assembly plants rather than manufacturing ones - no heavy industry is to be established. The production of agricultural machinery will be a new feature in Byelorussian industry.

Also in the five year period, the major cities of Byelorussia are to be restored - particularly Minsk, Vitebsk, Gomel, Mogilev, Bobruisk, Orsha, and Borisov. In all seven of these cities peat plants are to be rebuilt, and in most of them, brick plants and other industries such as porcelain works, clothing factories, tanneries, food processing plants, match factories, and agricultural machinery plants. Municipal and cultural services are to be restored, and housing is to be replaced. In the towns of the B.S.S.R. as a whole, 2.7 million square metres of state-owned housing space are to be made available for occupancy in the period 1946-50, including 650,000 square metres to be furnished by local soviets. An additional 1.5 million square metres are to be constructed by individual home owners assisted by the state loans.

In the sphere of cultural development, the number of schools in the B.S.S.R. in 1950 is scheduled to be 11,375, with an attendance of 1.5 million. The number of hospital beds is to reach 30,000.

Considerable industrial expansion is also planned for the western regions of Byelorussia. According to the plan, these regions are to contribute about one-fourth of the Republic's total industrial output in 1950.

Among the new industries scheduled for construction in the western area is a sugar refinery of 6,000 tons annual capacity in 1950. Other food processing factories are to be built, as well as a number of textile and clothing factories. Electric power stations are to be restored and new ones built, including hydro-electric stations. These are a major need in the western regions, which in 1938 had power facilities that supplied only 0.5 per cent. of the electricity in pre-war Poland, and were undeveloped in comparison with the Soviet Byelorussia.

II AGRICULTURE, LIVESTOCK BREEDING AND FISHING

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Before the war Byelorussia was one of the largest flax and potato-growing areas in the Soviet Union. In 1937, two years before the incorporation of Western Byelorussia, there were 255,000 hectares sown to flax and 631,000 hectares sown to potatoes in the B.S.S.R. The chief food crop produced in this Republic was grain (rye, wheat, oats, and barley), which occupied about 60 per cent. of the total area sown. In 1937 2,243,500 hectares were planted in grain, including 242,500 hectares of wheat, which before 1917 was produced on a very small scale.

The following table shows the area of the principal crops in the Byelorussian Republic in 1932 and 1937, compared with cultivated areas in the Soviet Union as a whole.

TABLE III

Byelorussian S.S.R.: Area of Principal Crops, 1932 and 1937
(thousand hectares)

	Byelorussian Republic		Soviet Union	
	1932	1937	1932	1937
Wheat	111	242.5	34,500	41,300
Rye	1,313	n.a.	25,800	22,700
Oats	613	"	15,400	17,600
All grain total	2,627	2,243.5	99,700	104,400
Potatoes	619	631	6,100	6,900
Flax and hemp	279	255	2,500[1]	2,125[1]
Orchards and gardens	76	n.a.	n.a.	n.a.
Total area under crop	3,983	3,514	134,400	135,300

1 Flax only.

Note: n.a. means not available.

Sources: Development of the Soviet Economy, Moscow, 1940; Second Five Year Plan, Vol. II, Moscow, 1934; Socialist Construction, Moscow, 1939; and Sown Areas of the U.S.S.R., Moscow, 1939.

From 1932 to 1937, as the table shows, there was a decrease of 468,000 hectares in the area under cultivation in the B.S.S.R. Average yields of all crops, however, had been increased to a great extent, so that total production was raised by several million tons.

TABLE IV

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Byelorussian S.S.R.: Production of Principal Crops, 1932 and 1937
(thousand metric tons)

	Byelorussian Republic		Soviet Union	
	1932	1937	1932	1937
Wheat	77.4	202.6	20,310.0	46,860.0
Other grain	1,616.3	1,618.3	49,480.0	73,430.0
Total grain	1,693.7	1,820.9	69,790.0	120,290.0
Potatoes	5,061.0	7,005.6	43,070.0	65,630.0
Flax	57.4	71.4	500.0	n.a.

Sources: Socialist Construction, Moscow, 1936 and 1939; Sown Areas of the U.S.S.R., Moscow, 1939; and Socialist Agriculture, Moscow, 1939.

Since the natural fertility of Byelorussian soil is not very high, improvements in the yields of various crops depend greatly on efficient cultivation, particularly on generous fertilizing, and other modern measures (including mechanization) which were widely applied on the farms of the U.S.S.R. during the collectivization of agriculture.

Collective Farms (Kolkhozes)

474 The greatest agricultural problems of the Soviet Union have been to increase the area under cultivation, to improve the methods of production, to raise yields per hectare as well as total production, and from this increased production, to insure that adequate supplies of food reach the towns and factories. The primary means of achieving these aims was the organization of individual farmers into collectives (kolkhozes), in which they could jointly maintain their livestock and work the land, using the most scientific methods of livestock breeding, soil cultivation, crop rotation and fertilizing, but above all, increasing the use of farm machinery. In the long run mechanization, with the replacement of horses by tractors, makes a greater area available for grain and other agricultural products such as potatoes and flax.

475 An outstanding feature of these new developments was the establishment of machine and tractor stations (M.T.S.), in which the government concentrated thousands of tractors, threshers, combines, and other large machines. The M.T.S., which had their own workshops and staffs of mechanics, carried out all the mechanized farm work for the collectives - ploughing, sowing, harvesting, etc. - in return for which they received fixed fees, payable in agricultural produce.

474 As a result of the growth of collectivization and the M.T.S., the need for human labour decreased; and the entire process of production was reduced to about half the number of work days required on individual farms. By the end of the second Five Year Plan (1938) there were 2.2,392 collective farms in the Soviet Union; 9,665 of them were located in Byelorussia. Altogether they cultivated 85 per cent. of the total area sown in the U.S.S.R. and produced the bulk of the grain, cotton, sugar, flax, and other raw materials required for the population, industry, and export. At the same time, the individual plots which the kolkhoz members were permitted to keep were furnishing a large part of the berries, fruit, and vegetables which appeared in the city markets.

There were two principal ways in which collective farms delivered agricultural products to the government: through payments in kind to the M.T.S. and the flour mills; and through direct sales of a certain quota. Whatever remained after the fulfilment of the quota, the collectives could distribute among their members.

As has been said, the Byelorussian Republic by 1938 had 9,665 collective farms, which in that year cultivated 2.8 million of the 3.3 million hectares sown in the Republic. That is, Byelorussian kolkhozes were responsible for tilling nearly 85 per cent. of the cultivated area of the Republic in 1938, while the machine and tractor stations were serving nearly 87 per cent. of the total crop area, not only the collectives, but some individual farms as well.[1] In the B.S.S.R. the number of M.T.S. had steadily increased from 63 in 1932 to 200 by 1937, and just before the German attack in June 1941 there were 342 machine and tractor stations in the Republic. The increase after 1937 was largely due to the growth of mechanization in Western Byelorussia, where under the Soviet system more than 100 of these stations were organized. (See next section..) 1/

407 A large number of machines was available in the Republic before the war, both in the M.T.S. and on individual farms. From 1932 to 1937 the number of tractors in the B.S.S.R. grew from 3,200 to 8,100; and by June 1941 the Republic had 12,000 tractors. In 1932 there had been only four harvesting combines in operation in Byelorussia; by the end of 1937 the number had risen to 674; and in June 1941 the Republic had 1,500 combines and 2,300 threshers at work. In addition to tractors and combines, trucks have also played an important part in the mechanization of Byelorussian agriculture. By 1938 the Republic possessed 4,237 trucks for farm purposes; and their total carrying capacity was reckoned at 7,600 tons. (Compare 195,800 trucks in the B.S.S.R. as a whole, with 352,100 tons carrying capacity.) At the

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1 According to a recent statement by the Byelorussian Minister of Agriculture, work on the cropland "before the war" was 60 per cent. mechanized. This lower percentage is explained by the fact that up to June 1941 Western Byelorussia was still in process of mechanization, and far behind other regions of the B.S.S.R.

1/ [See cat 116, pp 26-27 -- Analyst]

407 outbreak of the German attack, it was estimated that the B.S.S.R had 12,000 tractors, 1,500 combine harvesters, and 20,000 other agricultural machines.

Agricultural Development of Western Byelorussia

241 311 The arable area of the Byelorussian Republic was increased by about 3,597,000 hectares in 1939, when Western Byelorussia was rejoined to the Soviet Union. According to the Concise Statistical Yearbook of Poland, London, 1941, this territory in 1938 had 136,000 hectares under cultivation of wheat, 1,132,000 hectares under rye, 664,000 hectares under oats and barley, 518,000 under potatoes, and 60,000 hectares sown to flax.

241 423 Before the incorporation of the western territory into the B.S.S.R., its agriculture was primitive. Eighty to 90 per cent. of the population were engaged in agricultural work, and there was practically no mechanization. After 1939, however, many changes were made. The People's Assembly of Western Byelorussia declared all land, timber, and water resources to be the property of the state, (that is, public property);; and subsequently, 646,000 hectares of land were distributed among the poorer peasants, as well as 540,000 hectares taken from large estates and given to poor and middle-class farmers and to formerly landless hired men. Fourteen thousand hired men and poor peasants also received horses, and 33,400 households received cows.

474 [475] Many of the farmholdings were then organized into collectives; about 1,000 kolkhozes were formed in a short time, and over 100 machine and tractor stations erected. In 1940 these west Byelorussian M.T.S. had 1,500 tractors at their disposal - about 15 per cent. of all the tractors held by the M.T.S. of the Republic.

[727] The process of collectivisation in Western Byelorussia was interrupted by the German occupation, which destroyed the Soviet system of land utilization, and at present the work of reorganisation is not moving along very rapidly. By 1946 only about 100 collective farms, combining 2,802 individual holdings, had been reorganised and were again functioning; and this is but a small fraction of the peasant population in the western region. However, government officials state that no immediate pressure is being exerted to promote collective farms.

German Devastation of Agriculture

727 241 The German occupation from June 1941 until the summer of 1944 left Byelorussian agriculture exhausted and devastated. The enemy had destroyed 9,200 villages and more than 1,200,000 peasant holdings. Ninety-two state farms and about 10,000 collective farms had been plundered and destroyed. All the food processing plants had been blown up; and over 316 machine and tractor stations had suffered destruction and looting; from them the Republic lost 8,996 tractors, 1,105 harvester combines, and countless numbers of other agricultural machines which the Germans either wrecked or carried off to Germany.

727 231 Livestock was practically wiped out;[1] the Germans had confiscated more than two million head of cattle, three million pigs, and three million sheep and goats. A few cattle had been hidden away in the woods and swamps. The only horses left were those which had been either too old or too small for army use, and therefore discarded by the German or Soviet armies. Most small livestock had disappeared, and poultry and bees had vanished completely.

727 241 433 The land itself was in a terrible condition.[1] Orchards were neglected; and drainage systems had been either deliberately ruined to flood the land, or permitted to deteriorate. Crop areas had sharply decreased, and yields fell drastically for want of fertilizers and draught power to cultivate the land efficiently. The area of cereals had fallen by 42 per cent., that of technical crops by 86 per cent., and of potatoes, by 53 per cent. Crop rotation had been completely upset, and grasslands ruined. Nearly 20 per cent. of Byelorussian territory was literally a desert.

When the UNRRA Mission arrived in Byelorussia nearly two years after the liberation, agricultural conditions had not materially improved. In the course of a tour through eastern Byelorussia in June 1946, Mission members reported that "throughout the northeast region at least half the rural houses are destroyed." Some regions showed even greater destruction; in the Surazh region east of Vitebsk, only 661 houses remained in 1944 out of 10,136 pre-war dwellings. The town of Surazh itself had 1,395 buildings before the war, of which only three were standing in 1944. By June 1946 there were 150 buildings in the town, all newly built except the three mentioned.

In the Polotsk and Vitebsk oblasts (provinces) only 58 and 64 per cent. respectively of the pre-war crop areas were under cultivation in 1946, two years after the liberation. In 1945 the crop yields were only 25 per cent. of pre-war production. The UNRRA Mission stated: "The low yields and unplanted lands are largely due to lack of tractors and to the plough-land having become overgrown with weeds and brush since 1941. A large proportion of cropland is reported to be now idle because of uncleared mines, trenches, gun emplacements, etc. In the Surazh region uncultivated battlefields total one-quarter of the pre-war 87,500 acres of crop land."

The Polotsk and Vitebsk provinces possessed before the war 115,000 horses and 2,290 tractors; and about 2 million acres of land were under cultivation. In 1946 only 24,000 horses and 760 tractors were available; and 40 per cent. of the cropland remained uncultivated.

060 Since the time of these observations UNRRA Mission members have made many more inspection tours throughout the Republic. Among the many places they have had opportunity to observe was the Lenin Collective Farm in the Minsk raion (district), which they visited in December 1946. Because the experience of this farm is fairly typical, a small part of its history is reproduced in the following paragraphs.

[1] [In the war period from June 1941 to the Summer of 1944 -- Analyst]

Destruction of the Lenin Collective Farm[1]

474 The Lenin Collective Farm consisting of three villages and one sub-village, comprises an area of 1,500 hectares situated about 30 kilometres south of Minsk. It was organized in 1930 with 100 households, which had increased to about 200 by the outbreak of the war. At present there are 172 households with a population of 572 persons, of whom 208 are workers. Of these workers, only 57 are men. This proportion is explained partly by the shortage of men, and partly by the fact that a number of men reside in the village but work off the farm. There are 150 school children, and the remainder of the population are pre-school children, aged persons, and invalids.

474 727 During the German occupation, enemy forces were not situated in these villages; but punitive expeditions would come at intervals from Minsk, surround a village, and proceed to terrorize and kill the inhabitants. On at least one occasion the villages were bombed. The local people believe that the Germans were using the villages for target practice. In all, 177 people were killed during the war, of whom 20 were killed while fighting at the front, and the rest were civilians. Eight entire families were destroyed, and every family without exception suffered the loss of one or more members. Numerous children were orphaned.

The people remained on the farm during the first year of German occupation; then in the summer of 1942 they all fled to the forests - 70 leaving in a single day - and did not return to the farm until after liberation in 1944. Seventy-five members of the collective were partisans, in addition to those who served in the army.

The farm was thus completely abandoned for two years. The people returned late in the summer of 1944 to find their farm stripped of machinery, most of the barns and sheds burned, and nearly half of the dwellings destroyed. All the livestock not removed to the woods with the people had been either killed or driven off by the Germans before their retreat. The following losses were enumerated by the Collective Farm Chairman:

Dwellings. Seventy-two houses, including adjacent sheds; a clubhouse with accommodation for 160 people; and a large schoolhouse.

Barns and stables. Three large grain barns; three stables for horses; two stables for cows (120 animals capacity each); a pig shelter large enough for 150 animals; and a poultry farm with capacity for 260 hens.

Machinery and tools. Four tractors; three straw cutters; one silage cutter; two root cutters for making fodder; one clover thresher; one three-ton truck; and three narrow-row seeders.

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1 Report by Davis McEntire, UNRRA Mission to Byelorussia, December 13, 1946.

474 727 The farmers had hidden their ploughs, harrows, and small implements so that these were available with which to begin farming again in 1944; but all the heavy equipment was lost. Livestock losses amounted to 500 cattle, 125 horses, approximately 1,000 pigs, and about 800 sheep and goats. The peasants had taken their horses into the forests, and of those, 40 were brought back at liberation. These 40 horses and four cows were the sum total of livestock on hand at liberation.

In 1944, owing to the lateness of the season and to lack of implements, seeds and livestock, the farmers were able to sow only a very small part of their land. Most of the area brought into cultivation that first year had to be spaded by hand, because there was no draught power. In 1945 the farmers succeeded in bringing half of their their cropland under cultivation, still substituting hand spading for ploughing to a considerable extent.

As stated earlier, the area of this collective is 1,500 hectares. About 200 lectares are in meadows, 69 hectares in woods, and 421 hectares in pastures, gullies, and roads. The pre-war crop area was 810 hectares, and in 1946, this had been largely restored, except for hops, but not the pre-war yields. The following table shows the areas of cultivation in 1945 and 1946.

TABLE V

241 474 Lenin Collective Farm, Minsk Raion, Byelorussian S.S.R.: Crop Areas in 1945 and 1946 (in hectares)

	1945		1946	
Grain				
Oats	125		155	
Barley	75		75	
Wheat	25		19	
Winter rye	nil		186	
Winter wheat	"		8.5	
Buckwheat	10		8	
Total grain		235		451.5
Potatoes	100		94	
Vegetables	20		14	
Lupin (sown with rye)	nil		(83)	
Lupin (for seed)	10		9	
Clover	nil		90	
Hops	"		2[1]	
Total area sown		365		660
Fallow		445		150
Total cropland		810		810

[1]Pre-war area of hopyard, 4.5 hectares

Source: UNRRA Mission to Byelorussia, Minsk.

474 Special mention should be made of the hopyard, which before the war was a very profitable enterprise, bringing in a gross income of 65,000 roubles in 1940. The hops died out during the war and were replanted in 1946; they are expected to produce a marketable crop this year (1947).

433 Productivity of the Lenin collective farm[1] in 1946 was down to
241 40 per cent. below pre-war yields. The grain yield was 1,0 to 1.2
474 metric tons per hectare, compared with yields of 1.6 to 1.8 tons per hectare before the war. The potato crop was only 8 tons per hectare, half the pre-war yield of 16 tons, because the farm had unusually bad luck with potatoes in 1946, several fields being washed out completely.

The extreme decline is attributed to shortages of artificial fertilizers, formerly used in large amounts; the shortage of manure, resulting from the greatly diminished livestock herds; and the lack of machinery and manpower.

Ploughing is shallower than before the war; and seed bed preparation, less careful. The farmers realize that their ploughing and seed bed preparation are below the standards of good farm practice, but they are unable to do better until they get more tractors, implements, and horses. Before the war this farm customarily hired three or four tractors from the M.T.S.; in 1946 it was able to secure only one. Only 86 horses were available in 1946, and these on the average were smaller than before the war, and could not be fed as well. However, productivity in 1946 was greater than in the preceding year, chiefly because the farm had more men, more horses, and more equipment.

The Extent of the Post-War Recovery

433 In the Byelorussian Republic as a whole the crop year 1945 was the
241 first full year of reoccupation by Byelorussians. By 1946 agricultural production had made definite progress toward supplying the population with food. The sown area in 1946 reached 76 per cent. of pre-war, but the level of yields was depressed by inadequate soil preparation, shortages of fertilizers, and unfavourable weather. As a result the grain crop, although better than in 1945, was still only half of pre-war. The vegetable crop, grown largely from UNRRA seeds, was from 75 to 80 per cent. of pre-war in total production; while the potato crop, because rainfall was heavy during part of the growing season and because plantings were only 60 per cent. of pre-war, reached less than half pre-war in total output.

Seed Production

433 The inadequacy of seed supplies has been a serious hindrance to
241 full recovery of the pre-war area of cultivation. Particularly short were vegetable seeds (except potatoes), clovers, vetch, and timothy and other grasses, most of which are biennials or perennials requiring two years for the production of seed. There is also a shortage of flax seed;

[1] [See cat 114, pp 15-16 for 1945]

433 and the restoration of this crop is important not only to provide fibre
246 for the linen industry, but also to supply linseed oil, which is then further refined to produce edible oil, supplementing animal fats in the diet.

Clovers are especially needed to plant alternately in the areas where flax is grown. Both clover and timothy seed production were lost during the war. The improvement of these crops would do much to assist the rehabilitation of decimated and under-sized livestock herds. Plans have been made to reach a self-sustaining level of vegetable seed production by the spring of 1948. Adapted and satisfactory varieties of UNRRA seed are being used as parent stock.

Fertilizers

433 Fertilizers are an urgent requirement, as the low fertility of Byelorussian soil necessitates using large quantities both of manure and of chemicals. All are in extremely short supply. The fertilizer available in 1946 was only 15 per cent. of pre-war. The Byelorussian Minister of Agriculture estimated that in 1946 only 25 to 30,000 tons of potash were used, as compared with 160,000 tons before the war. As an example, one collective farm in the Polotsk oblast used before the war about 600,000 tons of fertilizers, but had only 500 tons in 1946.

In view of the shortage of manure and of the naturally slow progress in restoration of the soil-fertilizing grass and leguminous crops, large-scale measures are being taken in the B.S.S.R. to utilize peat as a fertilizer; the plan for 1947 is to use over 5 million tons.

Drainage Projects

312 Before the war Byelorussia was executing a plan for the ultimate drainage and reclamation of four million hectares of swamp land. Progress had been made by 1941 to the extent of reclaiming and planting 270,000 hectares. During the war the drainage system deteriorated, and in some places was deliberately destroyed to flood areas for defence purposes. Trench-digging and dredging machinery was removed by the Germans. Work on the restoration of the drainage canals began shortly after liberation; 25,000 hectares of drained land were restored to cultivation in 1945, and it was expected to restore an additional 33,000 hectares in 1946.

Farm Machinery

407 Farm machinery was, and is, badly depleted. In 1946 only three to five per cent. of the seeding of crops was done by machines; and tractors ploughed only about 20 to 25 per cent. of the cropland. The number of tractors available in 1946 was 25 to 30 per cent. of pre-war; but most of the machines were in bad condition, having been patched together from spare parts. It was hoped that UNRRA would be able to make early deliveries of tractors to the B.S.S.R.; but despite the urgency of the need, the Administration was not able to supply any

407 tractors in time for either the spring or the autumn ploughing season in 1946. The first shipment of UNRRA tractors arrived in the Republic in December. Altogether, UNRRA expects to deliver about 800 tractors. The Byelorussian Minister of Agriculture gave the Mission an estimate that 20,000 15-horsepower tractor units would be needed to reorganize farm work on an adequate level of mechanization.[1]

In speaking of the need for farm machinery in this Republic, the UNRRA Mission said: "It is important to recognize that Byelorussian farming is not a hand-tool agriculture. Rehabilitation and recovery here does not mean a better hoe - it means a better tractor. It means more combine threshers, more grain drills and mechanized equipment. Rehabilitation of agriculture here means re-establishment of the pre-war rate of mechanization of farms, which, in turn, will release labour for still more tractor factories and still more industrialization. Byelorussian farmers spaded by hand 200,000 hectares (half a million acres) in 1945 and half that amount in 1946. Such labours do great credit to the industry of the farmers, but a hungry Byelorussia and a hungry world will not be fed by such primitive farming methods."

Farm Buildings

727 362 By the end of 1946 enough housing had been repaired or built in the B.S.S.R. to enable 250,000 families (about 1.5 million people) to move from dugouts or caves into houses. Rural schools had also been transferred from dugouts to new premises. The Byelorussian newspaper Sovietskaya Byelorussia (issues of December 17 and 24, 1946) reported that 254,000 houses had been restored in rural areas since liberation. Eighty-two thousand had been rebuilt in 1944, 112,000 in 1945, and 60,000 in 1946, and 45,556 houses were still in process of construction. At the end of 1946, 10,000 rural families (50,000 people) were still living in dugouts and caves.

Farm Manpower

464 Besides the deplorable housing situation, which contributes to lowered work efficiency, there is a great shortage of labour. Since the war it is women rather than men who constitute the main labour force on Byelorussian farms. UNRRA Mission observations in mid-1946 gave a ratio of four to six women to every man. In some sections, 80 to 90 per cent. of the workers were women. On one farm visited the labour force consisted of five men, 75 women, and 21 young boys and girls. A total of 43 men from this one farm had been killed during the war.

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1 The 15-horsepower unit is the common method of computing tractor numbers. Most Soviet tractors are larger than 15-horsepower, but a 45-horsepower machine would be considered, for example, as equivalent to three tractor units. An editorial in Sovietskaya Byelorussia, Minsk, January 8, 1947, stated that the average output per 15-horsepower tractor in 1946 was 338 hectares of ploughing, sowing, harvesting, and threshing, which is 73 hectares higher than the average for 1945.

Livestock

231 Livestock production in 1946 was still less than a fourth of pre-war, and it was estimated that five years were necessary to restore it fully. Cattle numbers in May 1946 were reckoned by the UNRRA Mission at 30 to 35 per cent. of pre-war; pigs at 10 per cent., and sheep and goats at 25 per cent. Horses, although about 40 per cent. of the pre-war numbers, represented only about 25 per cent. of pre-war horsepower, because of age and small size.

One must bear in mind that these figures include not only the surviving livestock, but also gifts from other parts of the Soviet Union. Since the liberation, tens of thousands of cattle have been sent to Byelorussia by other Republics.

The pre-war numbers of livestock in Byelorussia, West Byelorussia, and the Soviet Union are shown in the table below.

TABLE VI

Pre-War Livestock Numbers in Byelorussia, West Byelorussia and the U.S.S.R.

	Byelorussian Soviet Socialist Republic		Western Byelorussia	Entire Soviet Union	
	1932	1937	1938	1934	1938
Horses	n.a.	700,000[1]	779,000	15,400,000	16,200,000
Cows	962,800	1,027,200	1,306,000	33,500,000	50,900,000
Other cattle	391,900	878,100	631,000		
Pigs	1,054,400	1,951,000	1,555,000	11,500,000	25,700,000
Sheep and goats	896,700	1,077,300	1,684,000	36,500,000	66,600,000

1 The 1935 figure

Sources: Socialist Construction, Moscow, 1936 and 1939; and Concise Statistical Yearbook of Poland, London, 1941.

In this table it is interesting to note that although in Western Byelorussia before 1939 there was almost no mechanization of agriculture, the number of horses claimed is only 9,000 more than in the Byelorussian Republic (approximately the same area) where tractors and other machines did 85 to 87 per cent. of the farm work.

433 As a result of the wartime decrease of livestock and of agricultural products, the production of fats and oils in the U.S.S.R. during 1946 was estimated to be only about 15 to 20 per cent. of pre-war. Before the war the principal sources of edible fats were lard and butter. Consumption averaged about 22 to 25 kilograms per head. The return of an adequate

433 supply is greatly dependent upon recovery in grain production. So long as the grain supply barely meets the needs for bread, very little will be used for hogs and cattle. To regain the pre-war production level of fats will require at least three to five years.

185 231 The Five Year Plan, 1946-50, provides that 17 meat packing plants, 10 poultry farms, 11 urban milk-processing plants, two milk canneries, and 150 dairies be restored or built in the B.S.S.R. As at December 1946 the Minister of Agriculture reported that 26,000 livestock farms were again functioning on collectives. These farms are looked to as the source of an estimated 35,000 tons of butter and cheese products in 1947.

Following is a table which shows the numbers of livestock in the B.S.S.R. in 1950, as fixed by the Five Year Plan.

TABLE VII

B.S.S.R.: Livestock Numbers in 1950 (Planned)

	Total	Including on collective farms
Horses	770,000	330,000
Cattle	2,860,000	852,000
Pigs	2,600,000	300,000
Sheep and goats	2,900,000	600,000

231 Source: The Five Year Plan, 1946-50.

It will be noted that the proportion of livestock held on the collectives is not great, except in the case of horses, which are regarded as means of production, and are therefore not allowed in private ownership. A comparison of the preceding figures with those in Table VI shows how heavily the war has reduced the numbers. It is particularly important to note that the number of horses for 1950 is fixed far below the pre-war number existing in Byelorussia after the incorporation of the Western region. As has already been seen, the lack of these animals is the more seriously felt because of the limited number of tractors available.

Improvement of the Collective Farm Organization

731 Despite the major difficulties, Byelorussian farmers in 1946 made considerable progress toward regaining the ground lost during the war. In this respect, they were more fortunate than those in other areas of the Soviet Union, to whom 1946 brought disaster. From Moldavia to the Urals, south to the Kuban and north to Moscow, crops were ruined by the worst drought since 1891. Particularly stricken was the Ukraine, which before the war supplied one-fifth of the grain for the entire U.S.S.R.

731 This natural catastrophe, in addition to all the other burdens of post-war recovery, has necessitated even greater efforts by the farmers to overcome handicaps and to boost production as high as their hardest labours will allow.

474 The Soviet Government has, since the drought,[1] taken additional steps to eliminate difficulties and to strengthen the collective farm management. On September 19, 1946, the Council of Ministers of the U.S.S.R. and the Central Committee of the Communist Party of the U.S.S.R. issued a decree calling for the elimination of abuses of the collective farm charter. [647] A Collective Farm Council was created, the main tasks of which are to establish "strict control over the observation of collective farm statutes"; to guard the collective farm property against embezzlement or misuse; and to ensure greater participation in the farm management by the workers themselves.

Under the new regulations of September 1946, all lands illegally taken from the collectives are being restored. Sovietskaya Byelorussia reported: "More than 81,000 hectares of land... have been returned to the collective farms (in Byelorussia)." Unauthorized personnel are being taken off the payrolls; administrative staff is being reduced; and the collective farmers are taking greater part in the administration of the kolkhoz. General meetings are called regularly, and management and auditing committees elected by the membership are responsible for reporting back to the membership. "The democratic procedure of convening general meetings for discussion of and decision on vitally important questions... is now being returned."[1]

Planned Increases in Agricultural Production

185 433 According to the Five Year Plan, 1946-50, the crop area of the B.S.S.R. in 1950 is to reach 5.3 million hectares, including 3.2 million hectares under grain, 344,000 hectares under industrial crops, 1.06 million under potatoes, vegetables, and fruit, and 690,000 hectares under fodder crops.

Average yields of all crops are expected to be as follows: grain, 1.03 metric tons per hectare; potatoes, 14.5 tons per hectare; and flax, 0.3 tons per hectare. These are somewhat lower than the yields fixed for the Soviet Union as a whole because of the relatively poor quality of the soil in Byelorussia: for example, in the B.S.S.R. in 1950 the average yield of grain is to be 1.2 metric tons per hectare, while that of flax is put at 0.4 tons per hectare.

According to the Moscow periodical, Slavyane (1946, II-III, pp.32-35), the B.S.S.R.'s total production of grain in 1950 will represent an increase of 10 per cent. over 1940. On this basis, the 1940 grain harvest must have been between 2.7 and 3 million tons. In the U.S.S.R. the 1940

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1 Sovietskaya Byelorussia, Minsk, December 20, 1946.

[1 in 1946--Analyst]

185 grain crop amounted to 119 million tons, and the target for 1950 is set
433 at 127 million metric tons. Production of potatoes in Byelorussia is to increase by 6 per cent., and of flax by 31 percent.

Fishing

226 Before the war fishing was an important source of food supply in Byelorussia, where the many inland lakes and streams abound in pike, perch, bass, sandre, bream, and other fresh-water fish. Osweia Lake, a body of water about 3,500 acres in extent, produced some 500 tons of fish annually, when 50 men were engaged in year-round fishing. At that time the fishing collective at the lake employed nets measuring almost a mile in overall length; but today very little fishing is being done for lack of nets and other equiptment. Osweia is not an isolated example.

[927] An extensive system of fish culture, including the stocking of fish and the addition of chemical fertilizers to assist plant growth in the lakes, was destroyed during the war. The Germans depleted available fish resources by discharging explosives under water to bring the stunned fish to the surface. Many young fish were exterminated by this method of explosive fishing, without regard to conservation. At present the system of fish culture in Byelorussia is being slowly reinstituted, but is handicapped by the lack of nets. UNRRA shipments of fishing gear have, however, contributed valuable assistance in this regard.

The new Five Year Plan provides that "by 1948, pond culture will be restored to pre-war proportions."

The fish catch in 1950 is expected to be 5,200 tons.

III INDUSTRY

498 Before the Revolution, industry in Byelorussia was primitive, consisting mainly of small handicrafts, such as the making of homespun linen from locally produced flax, or the moulding of pottery by hand. Under the Soviet system, however, a fundamental reorganization took place in the whole U.S.S.R. Many areas whose natural resources had previously not been utilized now began to be more fully developed; modern methods of production were introduced throughout the Soviet Union; and as a result, the total industrial output increased about eightfold.

In Byelorussia, as well as in the other Soviet republics, many changes occurred. In place of the former handicraft shops, large modern factories arose, turning out increased amounts of textiles, lumber, paper, glass, bricks, pottery, and cement. The extraction of peat was carried out on a more extensive scale, and the processes mechanized. At the same time, the number of workers employed in industry increased rapidly.

Industrial Population

In 1925, three years before the first Five Year Plan was launched, the factories of Byelorussia were located mainly in Minsk, Vitebsk, Mogilev, Bobruisk, and Borisov. These five cities had a total of 16,000 factory workers employed for the most part in small shops (only three plants had more than 500 employees) and comprising three-quarters of the factory workers then in Byelorussia. The distribution of industry was as follows: textiles exclusively in Vitebsk; shoe and clothing factories in Vitebsk and Minsk; electrical in Minsk; metal-working in Minsk, Vitebsk, and Orsha; woodworking in Bobruisk, Borisov, and Mozyr.

By 1932, the end of the first Five Year Plan, there were altogether 52,000 industrial workers in the B.S.S.R., compared with 39,000 in 1926. Twenty-two thousand of these were employed in the clothing, knitted-goods, and shoe factories. The woodworking and wood chemical plants absorbed about 12,000; metalworking, 7,000; the food industry, 5,600; and peat plants, 4,400 workers. In another four years (1936) the number of workers employed in large industrial establishments had risen to a total of 155,200.

Growth of New Factories

Some of the largest industrial enterprises which were set up in the B.S.S.R. in the course of the pre-war Five Year Plans (1928-41) were as follows:

438 Minsk. Two large machine construction factories, "Kirov" and "Voroshilov"; the "Bolshevik" leather factory; the "Kaganovich" footwear factory; the "October" clothing factory; a peat plant, and a brick plant.

Mogilev. The "Dimitrov" machine construction factory; the "Kirov" motorcar repair works; the "Kuibyshev" silk factory; the "Stalin" leather factory; a pipe foundry, and a peat plant.

Vitebsk. The "Krasny Metallist" machine tools factory; the "Clara Zetkin" hosiery; the "KIM" hosiery and knitted fabrics factory, employing 10,000 workers; the "Kaganovich" flax mills, and many textile factories.

Gomel. The "Stalin" glass factory; the "Trud" footwear factory; the "Vesuvji" match factory, and a knitted fabrics factory.

[433] Industrial output in this city increased 100 times in comparison with production before 1914. In addition to the large factories listed above, a big machine building works, "Proletary", produced turning lathes; and another large plant "Kaganovich", was constructed to turn out agricultural machines. Gomel being a large railway junction, railway truck building works and railway engine repair works were also built there.

Other cities. In the small towns of Byelorussia, where before 1917 there were no industrial enterprises at all, a number of plants were developed; for example, in Bobruisk, large wood processing and clothing factories; in Krichov, a large cement factory; and in Orsha, a flax mill, meat cannery and brick works.

433 Altogether, in the course of the pre-war Five Year Plans, industrial output in the B.S.S.R. increased considerably. The following table, reckoned in terms of 1926-27 prices, compares production in 1937 with the level of output in 1932.

TABLE VIII

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B.S.S.R.: Industrial Output in 1932 and 1937
(in million roubles, 1926-27 prices)

	1932	1937
Metalworking	81[1]	233[1]
Chemical	43.9	106.7
Woodworking	115	201
Paper	18.5	42.1
Hosiery	29.6	117.3

1 The output of the metalworking industry of the entire Soviet Union in 1932 and 1937 amounted to 9,410 million and 27,519 million roubles respectively.

Source: Socialist Construction, Moscow, 1939.

The gross industrial output of the B.S.S.R. in 1937 was 1,926 million roubles, as compared with 1,018 million in 1932 and only 116 million in 1913. In the Soviet Union as a whole, gross industrial output was 95,932 million roubles in 1937 as compared with less than half that amount (or 43,343 million roubles) in 1932.

Industrial Development of Western Byelorussia

Of the twelve oblasts which today comprise the Byelorussian Republic, five (Baranovichi, Brest, Pinsk, Grodno, and Molodechno) are in the western areas which were a part of Poland between 1920 and 1939. In 1939, when these oblasts rejoined the B.S.S.R., nearly 90 per cent. of their population was employed in agricultural work. The level of industry, as well as of agriculture, was very primitive, the yearly per capita industrial output being only 48 roubles, compared with 400 roubles per person output in the Byelorussian Soviet Republic. Despite the fact that in the western areas 88,000 hectares were under cultivation of flax in 1939, there were no flax mills in operation; whereas the B.S.S.R. by that time had 70 flax mills at work.

To overcome the relative backwardness of the western region and to assist the mechanization of agriculture, the Soviet Government invested 726,400,000 roubles there in 1940. In the period between incorporation and the German attack in June 1941, some increase in industrial output was achieved. For example, the match factory at Pinsk trebled its output.

727 Grodno, an important town in the western area, before the war had a bicycle plant, agricultural machinery works, a tobacco factory, lime works, and a shoe factory, all of which were demolished during the war. Brest, formerly named Brest-Litovsk, was a city of importance with a streetcar and sewer system and river traffic on the Bug. In August 1946,

727 when visited by UNRRA Mission observers, Brest was found to be about 50 percent. destroyed, and with a population estimated at 35 to 40 thousand, making it no more than the sixth city in size in the B.S.S.R. Baranovichi, also visited by UNRRA observers in August 1946, was found half demolished and with a population of 20,000. The municipal economy had been so little developed in Baranovichi that the Oblast Soviet Chairman, speaking before the Byelorussian Supreme Soviet as a Deputy in September 1946, asked that five million roubles be allocated in the Five Year Plan for the construction of a water works and sewer system in the city.

438 185 During the Five Year Plan, 1946-50, considerable industrial expansion is planned for the western oblasts. If the Plan is fulfilled, they will contribute about one-fourth of the Republic's total industrial output in 1950.

Among the new industries scheduled for construction in the western areas is a sugar refinery of 6,000 tons annual capacity, to be located in the Grodno oblast. In the city of Grodno will be built a woollen cloth factory which, together with a new factory to be constructed in Minsk, will produce 1.6 million metres of woollens in 1950. At Lida in Baranovichi oblast is to be founded a rubber shoe-sole factory which by 1950 is to produce half the requirements of the B.S.S.R.'s shoe industry. A sheepskin overcoat factory is to be built at Pinsk. New bread factories are to be put in operation in Grodno, Brest, and Pinsk; a food concentrates plant will be built at Lida; and the meat-packing plant at Baranovichi is scheduled for restoration.

377 185 Electric power stations are to be restored in Grodno and Brest, while new ones will be built in Baranovichi, Lida, Pinsk, and Molodechno. Hydro-electric stations will be constructed also, among them a station on the Shar river at Slonim and a larger station of 7,000 kilowatts at the Vileia waterfall in Molodechno oblast. As has been stated earlier, electric power facilities are a major need in the western oblasts, which in 1938 supplied only 0.5 per cent. of the electricity in pre-war Poland.

508 Also to be built at Brest is one of the Republic's three largest airports; the other two to be in Gomel and Minsk.

German Destruction of Industry

727 The destruction of Byelorussian industry by the Germans during the war was savage, systematic, and complete. At the Minsk trial of war criminals in January 1946 it was charged that the Germans had demolished or transferred to Germany the buildings and equipment of 10,338 of the B.S.S.R.'s industrial enterprises. The methods employed for this destruction were identical throughout the Republic.

In Minsk, for example, the industrial enterprises had been turned over to four or five German firms (Borman, Schorowa Werk, Trebotz, Schlachthof, and Trol), which carried off to Germany or to German-occupied territories, all the equipment and machinery which was of any

727 value; the Germans then proceeded either to blow up the buildings or raze them to the ground. They thus destroyed 23 of the largest factories, the railway-car repair works, the machine-tool plant, the "Proletari" glass factory, the brick kilns, the "Odarnik" sealos manufacturing plant, the meat-packing plants, eleven bakeries, confectionery and biscuit factories, the knitted-goods mills, and the "October" and "Krupskaya" garment factories.

In their inspection tours of the B.S.S.R., UNRRA Mission observers have noted wide-scale devastation and plunder everywhere; the most severely devastated areas being the northeast and central sections of the Republic. After a visit to northeast Byelorussia, Mission members reported that they had not seen a single factory intact. Devastation of industry was complete, and restoration has had to start from the ground up.

339 Starting from the ground up, however, is always difficult; and
727 it is particularly difficult in the B.S.S.R., where there is a shortage of everything required to do the job. Building materials, electric power, machinery, and transport are all critically scarce. The chief building material seems to be salvaged brick from the rubble of destroyed factory buildings; and most of the reconstruction work is being done by hand. Power equipment of the kind ordinarily seen on major construction jobs is almost completely lacking. UNRRA Mission members even as late as June 1946 had not seen a crane, powershovel, bulldozer, scraper, or tractor in use. Later in the year some of the UNRRA machinery began to arrive, but nowhere in quantities sufficient to make a real impact.

Lumber and bricks for reconstruction purposes are being manufactured at restored factories, but output is only a fraction of normal. Under the German occupation practically all sawmills in Byelorussia were looted of machinery and then demolished when the Germans were driven out. In Vitebsk oblast, all the large pre-war sawmills were destroyed. Up to June 1946 it had been possible to restore only a few. Polotsk oblast before the war had 12 large sawmills; in 1944 only about five to ten per cent of the sawing frames remained. By mid-1946, although 17 sawmills were operating in this oblast, their work was proceeding on a very small scale, usually in the open air, and with limited equipment. Output of lumber was greater than before the war, but it consisted only of logs, beams, and rough-finished boards, since the equipment was inadequate for well finished work.

Brick plants were likewise destroyed by the Germans, and are in process of restoration. In Polotsk oblast, for example, there were before the war, 36 brick yards. In 1944 there was not one remaining in the entire oblast. In the summer of 1946 there were 17 back in partial operation; and 32 more were expected to be built in 1946-47.
339 The UNRRA Mission to Byelorussia supplied the following description of Polotsk brick factory No. 4, which had been partially restored by June 1946:

339 "Before the war this factory was fully mechanized, driven by electric power from an 85 kilowatt dynamo and producing ten million bricks a year. Today the only mechanized processes are the elevation of clay and the actual mixing and pressing of the brick. The clay is dug from the nearby river bank by hand. Water is pumped from the river by hand, six women operating a rocker hand-pump, three at each handle. The freshly processed bricks are lifted by hand from the machine into small cars, and the latter are then pushed by hand over a track to the drying sheds and furnace where again all operations are by hand. Power for the processing machine is supplied by one antiquated 60-horse-power stationary steam engine which broke down once during our short visit.

[433] "The production goal for 1946 at this Polotsk plant[1] is four million bricks, estimated by the Russian director as enough to build 40 apartment houses of ten four-room apartments each. Present output is limited to the capacity of one double-nozzle pressing machine, which we estimated could produce approximately 23,000 bricks per eight-hour day. This output may be contrasted with the brick plant in the UNRRA programme which is to have a specified capacity of 60,000 bricks per eight hours."

727 393 433 Probably typical of the general industrial situation in 1946 was a radio factory at Minsk, visited by UNRRA Mission observers in May. Before the war it was said to be the largest radio factory in the Soviet Union, with an output of 1,000 radios weekly. The Germans removed all the machine tools and other equipment and wrecked the interior of the building, leaving only the outer walls standing. Partial rebuilding of this factory required more than a year. Machine tools were brought from Germany, and the factory in May 1946 was estimated to be producing some what less than a third of its pre-war rate. Before the war the factory had a staff of 2,200 persons. The labour force at the time of these observations was 550, plus 60 to 70 German war prisoners. Of the workers employed, only 50 had worked in that particular factory before the war. Many of the present workers are very young, some just in their teens; and a large percentage is women. Since the factory itself had no training programme, its workers were trained in the Labour Reserve.

323 433 Where no machine tools are available, progress is even more limited, and the range of possible products is much reduced. For instance, the glass factory at Borisov is limited to hand-blown articles. No rolling equipment was available; hence no flat glass could be produced, although window glass was urgently needed for reconstruction of other industries and of housing. In the Vitebsk garment factory, the only sewing machines available are treadle-operated old fashioned models. In many instances, shoe production was largely confined to hand cobbling. Even where the factories have been restored and could produce more, the shortage of raw materials 433 depresses their output. The linen factory in Orsha was the largest in the Soviet Union before the war. In 1946 it was 70 per cent. restored, but flax production was so limited that the factory was

[1] [Brick factory No. 4--Analyst]

433 manufacturing linen from scraps. The aluminum factory in Borisov was making utensils, but the material available, all of which was supplied by UNRRA, was sufficient for only a small output.

Labour

464 As has already been noted, there is a shortage of all categories of workers. The outstanding characteristic of the present force is the high percentage of women and youthful workers. In the factories observed by the UNRRA Mission, from 75 to 90 per cent. of the workers were women and young people. Many of these are being trained in special schools.

The Five Year Plan in Industry

471 Under the new Five Year Plan for the rehabilitation of the Soviet economy, the volume of capital investments in the B.S.S.R. in 1946-50 is to be 6,950 million roubles, including 2,422 million for works under the Republic's jurisdiction. In the Soviet Union as a whole, capital investments for the same period are to amount to 250,300 million roubles, of which 157,500 million are to be used in industry.

433 185 The volume of production of Soviet industry in 1950 (the last year of the five year period) is fixed at 205,000 million roubles (in 1926-27 prices), an increase of 48 per cent. as compared with the 1940 output of 138,500 million roubles.

In Byelorussia, the volume of industrial goods produced by the Republic in 1950 is to exceed pre-war output by 16 per cent. The enterprises under the Republic's jurisdiction are to produce goods valued at 2,200 million, of which the output of state industries under local jurisdiction and of industrial co-operatives is to comprise 850 million roubles. The following table shows the physical goals fixed for Byelorussian industry under the Plan.

TABLE IX

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B.S.S.R.: 1950 Planned Industrial Output Compared with U.S.S.R. Total

	Byelorussian Republic	Soviet Union total
Electric power (kilowatts)	650,000,000	82,000,000,000
Peat (tons)	4,162,000	44,300,000
Metal-working machines (units)	4,325	74,000
Tractors (units)	5,000	112,000[1]
Cement (tons)	320,000	10,500,000
Window glass (square metres)	5,000,000	80,000,000
Felled timber (cubic ")	11,100,000	280,000,000
Dressed lumber (cubic metres)	1,800,000	39,000,000
Matches (thousand boxes)	1,550,000	n.a.
Meat (tons)	46,000	1,300,000
Butter (tons)	10,000	275,000
Fish catch (tons)	5,200	2,200,000
Alcohol (decalitres)	7,600,000	100,800,000

1 Tractor production:

Russian S.F.S.R.	82,000
Ukraine S.S.R.	25,000
Byelorussian S.S.R.	5,000
Total	112,000

Source: The Five Year Plan, 1946-50.

The post-war Five Year Plan is a programme encompassing both reconstruction and new construction. Its aim is not only to restore war devastated industry, but to exceed pre-war production. Some indication of the expansion involved may be obtained from a comparison between Table IX and the following table, which shows the pre-war output of certain products for Byelorussia compared with the output of the Soviet Union as a whole. The figures given refer, of course, to the former boundaries of the Byelorussian Republic.

TABLE X

Output of Certain Products in the B.S.S.R., 1932, and Planned Output for 1937
(metric tons)

	Byelorussian Republic		Percentage of total U.S.S.R. output	
	1932	Planned for 1937	1932	Planned for 1937
Peat	800,000	2,100,000	6.06	8.47
Cement	n.a.	110,000		1.57
Meat	12,300	28,800	2.83	2.30

Source: Second Five Year Plan, Moscow, 1934, Vol. II, p.498.

185 433 Compared with 1940, the capacity of Byelorussian electric power stations in 1950 is to increase by 220 per cent.; peat production is to rise 127 per cent. above the 1940 output; the output of bricks and lime is to increase fourfold; and the production of tile is slated to be about nine times over 1940.

Among the twelve oblasts in the Republic, Minsk oblast is scheduled for the greatest industrial expansion. In the construction programme are new factories for the output of cloth, penicillin, Deft-ware, porcelain, peat briquettes, boilers, radiators, instruments, bicycles, motor trucks, and tractors. The 1950 output for the last three factories is to be 100,000 bicycles, 1,000 7-ton trucks and 5,000 tractors. In the city and environs of Minsk alone capital investments are scheduled at the rate of nearly one million roubles a day during the course of the five years.

Another area in which large developments are projected is Gomel oblast, which in 1950 is to produce 787,000 tons of peat, 90 million bricks and tiles, and five million square metres of window glass. (In 1928 the total Byelorussian output of window glass was estimated at 1,170,000 square metres.)

Forestry

137 According to the census of January 1, 1935, the forest area of the B.S.S.R. was 3,817,000 hectares, 22.9 per cent. of the area of the Republic, and 0.6 per cent. of the total forest area of the Soviet Union. Another 2,538,000 hectares were added to the B.S.S.R.'s forest area in 1939, when West Byelorussia was rejoined to the Soviet Union.

Timber

313 The production of commercial timber, largely pine, fir and oak, has been centred in the areas of Bobruisk, Mozyr, Borisov, and Polotsk. Timber is considered one of the most valuable of Byelorussia's natural resources, and has figured largely in her relatively insignificant export trade. In 1926-27, for example, an income of 20 million roubles was realized from export of timber, at a time when the Republic's budget totalled 80 million roubles, and the gross output of industry was valued at 133 million roubles. In 1924-25, the only year for which details on the export of timber are available, the timber shipped from the B.S.S.R. amounted to 587,000 cubic metres of firewood and 749,000 cubic metres of other timber. About 60 per cent. of this was sent to the Ukraine (within the U.S.S.R.) and the remainder, plywood, oak, pine, and other products, was shipped abroad via the Baltic States.

The advanced development of the timber industry in the B.S.S.R. is revealed by the number of sawing frames which the Republic had in pre-war years. As at April 1, 1939, (before the incorporation of Western Byelorussia) the B.S.S.R. possessed 256 of the Soviet Union's 6,500 frames.

313 This high proportion should be contrasted with the small forest area of this Republic in relation to that of the whole U.S.S.R.

185 313 433 The goal set for timber deliveries by the B.S.S.R. in 1950 is 11,100,000 cubic metres; and cuttings during the period 1946-50 are planned at 58,400,000 cubic metres. The aggregate timber deliveries attained during four and one-quarter years of the first Five Year Plan, 1928-32, amounted to 32,600,000 cubic metres, or 7,670,000 annually. In 1928 it had been estimated that the timber resources of the B.S.S.R. were adequate to permit cuttings of 12 million cubic metres a year by 1932. This scale of cuttings was never reached, but the figure is mentioned here because it approximates the present plan of annual deliveries set for 1950, at a time when the area of Byelorussia is about double what it was in 1928.

The reason for this is that a large amount of easily accessible timber was burned out by the Germans during the war. The Governor of Vitebsk oblast, quoting from official figures, told members of the UNRRA Mission in June 1946 that 22 per cent. of the oblast was covered by good timber before the war but at present only 16 per cent. It was estimated by the Governor of Polotsk oblast that 46 percent. of the forests of the oblast were cut, burned or taken away during the war. Post-war cutting operations will therefore be restricted in many areas, and a reforestation programme will be carried out on an area of 189,000 hectares. Meanwhile, felling will be centred in the dense swamp areas previously untouched and impossible to exploit without extensive development of motor and narrow-gauge haulways provided for in the Five Year Plan.

Of the 1950 goal for timber production, 5 million cubic metres is set for annual production under the direction of the Timber Ministry of the B.S.S.R. An undisclosed amount will be produced under the auspices of local and co-operative industry. Although no full details are at present available, nevertheless, a few comparisons with pre-war production are possible. For example, in 1928 the production of plywood in Byelorussia amounted to 59,000 cubic metres, and in 1940 to 254,000 cubic metres (36.2 per cent. of the plywood output of the Soviet Union). In 1950 the plywood output of republican, local, and co-operative industry is scheduled to be 118,500 cubic metres. No pre-war figures are available for sawn lumber output, except for 1928, when 636,060 cubic metres were produced. The planned output of sawn lumber for 1950 is 1,800,000 cubic metres, nearly three times the 1928 amount.

[439] As for the export of timber, no figures are available, but it is known that Byelorussian timber has been and still is an important source of mine props for the Donets coal mines in the Ukrainian S.S.R.

313 185 However, in view of the tremendous shelter rehabilitation programme in devastated Byelorussia, it does not seem likely that there will be much surplus timber available. Of 400,000 collective farm houses scheduled for restoration, only 60,000 are to be built of brick. An equal, if not larger, number of public buildings were destroyed on collective farms;

313 and only 22,700 are to be rebuilt of brick. The remainder, totalling
185 over a million buildings of all kinds in the rural areas alone will be rebuilt with timber. Urban shelter restoration will also require large amounts of lumber. (In 1946 the "Komintern" woodworking combinat in Bobruisk had milled 36,892 cubic metres of lumber, by October 27, of which 27,000 cubic metres was earmarked for restoration work in Minsk.)

471 Another indication of the current importance attached to the timber
313 industry is the fact that the largest investments in the 1946 state budget for the R.S.F.S.R. were the 120,514,000 roubles allocated to the timber industry. This represents 28 per cent. of the total capital investments made in the Byelorussian budget for 1946.

Paper and Match Production

289 In 1937 paper production in the R.S.F.S.R. reached 57,100 tons, or 6.87 per cent. of the total paper production of the Soviet Union, which was 831,600 tons. R.S.F.S.R. production of paper in 1932 was 28,700 tons, or 6.09 per cent. of the total.

372 Pre-war match production in the R.S.F.S.R. was 28.9 per cent. of
433 total Soviet Union output. Output in the R.S.F.S.R. in 1950 is to be 1,550 million boxes, and depends on the restoration of the pre-war factories. One of the largest match and plywood factories in the U.S.S.R. before the war, was the plant at Borisov, which the Germans systematically looted and destroyed. Before the war this factory had eight automatic machines for the production of wood matches, which were then widely exported, some being shipped to the United Kingdom and the U.S.A. Plywood, box shook, and other wood products were also produced. During the war four of the machines were removed to Germany, and the remainder were demolished when the Germans retreated. In June 1946, when the UNRRA Mission to Byelorussia observed this factory, it had one unit assembled from salvaged spare parts; and this unit was producing at the rate of 300,000 pocket-boxes of matches daily. Many processes were being operated by hand.

The plant originally consisted of several buildings, most of which are still either in complete ruins or have only the walls standing, without windows or roofs. Concrete floor foundations remain, with a few imbedded iron bars to which pre-war machinery was bolted. Present operations are carried out in the single building which has been restored, and is covered with a new roof. At present, one-third of the match factory space, and one-fifth of the total floor space is in operation. Present plans call for an output of 600 million boxes a year by 1950, or 1,397,000 boxes a day. Before anything like this output can be achieved, several more buildings must be restored, and additional machinery must be procured. Moreover, the demolished
372 electric power plant adjacent to the factory must also be restored to pre-war capacity. The Mission reported, however, that as at most other factories, building restoration was almost entirely a hand process;

372 only one concrete mixer was observed. Before the war, the Borisov match factory had 5,000 workers; in June 1946, the number was only 700.

Peat

316 For most countries the output of peat may not be a significant index of industrialization. In Byelorussia, however, it has been and remains one of the primary indications. For example, 91 per cent. of the steam power plants erected during the first Five Year Plan were based on peat as a fuel. In addition to this use, large quantities of peat are to be used as fertilizer in the next five years.

135 At January 1, 1934, peat deposits in Byelorussia were estimated at 2,670 million tons, compared with 95,426 million tons in the entire Soviet Union. (Later estimates for the U.S.S.R. give the figure of 150,000 million tons, 48.5 per cent. of total world reserves.)

316 In 1932 the output of peat in the B.S.S.R. amounted to 834,000
433 tons (6.06 per cent. of Soviet Union output). Production in 1937 rose to 2,445,300 tons, and for 1940 was estimated at 3,260,000 tons. The Five Year Plan fixes the B.S.S.R.'s output of peat in 1950 at 4,162,000 tons, and provides that peat workings with an aggregate annual capacity of 1.6 million tons shall be put into operation, and peat briquette plants built with an annual capacity of 130,000 tons.

Textiles and Clothing

288 The textile industry of Byelorussia is centred in the Vitebsk and
433 Mogilev areas, which saw extensive development under the pre-war Five
185 Year Plans. No major change in the distribution is foreseen in the next five years, at the end of which Vitebsk and Polotsk oblasts, together with parts of Mogilev and Molodechno oblasts, are scheduled to contribute 83 per cent. of the Byelorussian textile output. Some of the production targets for 1950 are as follows:

Cotton cloth	2 million metres
Linen cloth	3 " "
Woollen cloth	1,660,000 metres
Carpet	1,254,000 metres
Plush	290,000 metres

The output of woollens, carpet, and plush is to be obtained from new factories scheduled for construction in Vitebsk, Minsk, and Grodno. Linen will be produced in restored factories; and it should be pointed out that the figure of three million metres is additional to a considerable output of linen cloth expected in 1950 from the restored linen combinat in Orsha, an enterprise under the management of the U.S.S.R. Textile Ministry. (In pre-war years, this linen mill, which was built during the first Five Year Plan), had a capacity of 14 million metres of cloth per year.)

288 The output of cotton cloth in the B.S.S.R. will also come from
439 restored mills. The two million metre target is considerably below
185 the 1937 output of 9.3 million metres (0.27 per cent. of total Soviet production), and even below the 1932 rate of 4 million metres, or 0.15 per cent. of the Soviet Union total.

295 Finished clothing, shoes, and hosiery in the B.S.S.R. are produced
433 under the Byelorussian Ministry of Light Industry; and the output in
185 1950 is expected to be as follows:

Shoes	7 million pairs
Hosiery	13.5 " "
Knitted underwear	3,510,000 units
Knitted clothes	1,680,000 "

The shoe output will come mainly from large restored factories in Minsk, Vitebsk, Gomel, and other cities. The above figure does not include output under co-operative and local industry; the total shoe production in Byelorussia in 1950 being set at 9,430,000 pairs, as compared with 8,075,000 pairs in 1937, (4.41 per cent. of total Soviet production) and 3,462,000 pairs in 1932, (3.98 per cent. of the Soviet Union output).

The lower production targets for cotton cloth and hosiery may be associated with the fact that the U.S.S.R. now has available new sources of textiles and clothing, notably at Lvov, Khaipolia, Riga, Narva, Tallin, and other Baltic cities. Moreover, under the national Five Year Plan for the U.S.S.R., the cotton textile industry of Central Asia will be expended near the sources of raw cotton, and proportionately less cotton will have to be shipped to processing mills in European areas of the Soviet Union.

Electric Power Stations

377 In 1937 the electric power stations of the B.S.S.R. had a capacity of 88,600 kilowatts and produced 430.4 million kilowatt hours of electric energy. Considerable progress had been made in electrification since 1932, when the B.S.S.R.'s stations had a total capacity of 60,000 kilowatts and produced 176.7 million kilowatt hours. For the entire Soviet Union, the output of electric energy in 1937 was 36,400 million kilowatt hours, as compared with only 13,540 million in 1932.

377 During the war the electric power stations of Byelorussia were
727 almost completely destroyed by the Germans. Since liberation they have been restored to only a limited extent, despite assistance from UNRRA, which, as part of the industrial rehabilitation programme, has furnished a number of power stations complete. In June 1946, when UNRRA Mission members visited Borisov, Orsha, Vitebsk, and Polotsk, facilities were estimated to be as follows.

TABLE XI

377 727 Electric Power Facilities in Four Byelorussian Cities, Pre-War and June 1946

City	Population June 1946	Pre-war capacity of electric stations (kilowatts)	June 1946 as per-cent. of pre-war
Borisov	43,000	4,500	22
Orsha	34,000	30,000	10
Vitebsk	62,000[1]	12,000	6
Polotsk	24,000	2,500	2

1 1939 population: 167,424.

Source: UNRRA Mission to Byelorussia, Minsk.

In these cities, all electricity available was being consumed by industry and public institutions, while dwellings were virtually without light. At Orsha, the restored facilities could have furnished light to dwellings as well, provided there had been wiring, switches, and bulbs.

The situation in rural areas is even worse. Before the war many collective farms had their own small electric power stations, all of which were plundered or destroyed by the Germans. The Surazh raion had six small farm stations with a total capacity of 800 kilowatts before the war; but even as late as June 1946 it had nothing, because although a new station was under construction at Surazh, there was no equipment for it.

The present shortage of electric power is a serious obstacle hampering industrial recovery. In this respect, UNRRA is making a considerable contribution. As at October 1, 1946, 30 power units with a total capacity of 8,400 kilowatts had been shipped to the B.S.S.R., and 35 additional units representing electric generating capacity of 10,400 kilowatts were still to be delivered.

185 377 The Five Year Plan calls for the output of 650 million kilowatt hours of energy in 1950. To achieve this, electric power stations with a capacity of 243,000 kilowatts are to be rebuilt and put into operation. Small hydro-electric stations with a total capacity of 16,000 kilowatts are to be built, and the municipal power stations at Gomel, Mozyr, Grodno, and other towns restored.

For the development of the economy of the Republic, there are to be put into operation electric power stations under the Republic's jurisdiction with a total capacity of 47,000 kilowatts, including hydro-electric stations with 10,000 kilowatt capacity.

Transport

Railways

496 In 1928 the length of the railways in the B.S.S.R. was 2,500 kilometres; in 1932 - 3,000 kilometres; and in 1937 - 3,100 kilometres.[1] In 1937 the railways of Western Byelorussia had a length of 3,415 kilometres, according to the Concise Statistical Yearbook of Poland, published by the Polish Ministry of Information, London, 1941.

Roads

727 491 During the war, both railroads and motor roads suffered devastation and demolition at the hands of the Germans. The following extract from an UNRRA Mission report of June 1946 conveys the situation with respect to roads in the B.S.S.R.:

"In the cities visited andalong the roads travelled by the Mission party during our 700-mile motor trip, all bridges and culverts had been destroyed. What had once been reinforced concrete and steel spans across the Berezina at Borisov, the Dnieper at Orsha, and the western Dvina at Vitebsk and Polotsk, are now reduced to rubble piers in the river beds and demolished approaches. Substantial wooden bridges, resting on log piers, have been erected at the main crossings, and remain today much as they were when first built in 1944 by the Red Army advancing westward. Some destroyed bridges have not been replaced at all, and river crossings are effected only by boat. Small bridges and culverts have been largely replaced by temporary plank crossings, and there are still numerous winding detours around culverts that remain unrepaired on less frequented roads.

"In our trip we travelled over three kinds of road surfacing: hand-packed dirt, cobblestone, and asphalt. The Minsk-Moscow three-lane asphalt highway is in good repair over the stretch covered from Minsk to Orsha, and along the roadside we observed several road repair gangs with asphalt pots and two or three road rollers, of the trailer type. Elsewhere we travelled over cobblestone and dirt roads, all of which were in fairly good condition but are still pitted with remnant shell holes and numerous ruts, which in rainy weather are difficult to pass through. One trip which we planned to make, from Lepel to Bigomel, the partisan city which never surrendered to the Germans, had to be abandoned at the last minute because the bridge at the main river crossing en route had been blown up by the Germans and was not yet restored. Although road repair equipment could be used to good effect along the dirt and cobblestone roads, not more than half a dozen pieces of such equipment were observed during the entire trip, after leaving the Minsk-Moscow highway."

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1 Socialist Construction, Moscow, 1939.

Housing Reconstruction

727 The cities of Byelorussia were universally laid waste by the Germans, and even today they are still in ruins with great empty spaces and blocks of gutted buildings. Rebuilding is proceeding slowly.

362 185 According to official estimates, 74 per cent. of the housing space in cities and raion centres of the B.S.S.R. was destroyed during the war. The Five Year Plan calls for the restoration of 4,200,000 square metres of urban housing during the next five years, of which 1.5 million square metres are to be constructed by individual home builders assisted by state loans. During the two years between liberation and September 1946, a total of 1.2 million square metres of housing had been restored in cities and raion centres; but this was the easiest part of the work, since it involved mostly the repair of those buildings which still had some walls standing. Housing restoration will have to move at a faster rate than 600,000 square metres a year to reach the 4.2 million square metres goal by 1950, when there is to be an estimated 8.2 million square metres of urban housing space in Byelorussia.

In the restoration plans, provision is made to erect three pre-fabricated house factories with a combined annual output capacity of 600,000 square metres of housing by 1950.

The long-term housing plan is to provide 9 square metres per person, according to the Mayor of Minsk. However, in October 1946 facilities were much below that standard, and it seemed doubtful to the UNRRA Mission whether the figure would be reached by 1950.

The present per capita housing space available is not known. But in cities like Gomel, UNRRA Mission observers have been given estimates that available houses are occupied at double to triple their pre-war capacity.

The only available figures on pre-war housing are those for the first Five Year Plan period. These apply to what were then classed as "okrug", or regional cities, of which there were in 1927, eleven with a combined population of approximately 540,000. In 1927-28 they had a total of 3,093,000 square metres of housing space, occupied at the rate of 5.5 square metres per person. The first Five Year Plan called for expanding the housing space in "okrug" cities to a total of 4,263,000 square metres, occupied at the rate of 6.69 square metres per person.

The target of 8.2 million square metres of urban housing space by 1950 is about double the 1932 figure. This amount, including housing in some 170 raion (district) centres, is distributed among what are classed as "oblast" cities (these governed directly by the oblast or regional soviet as well as by the local city soviet), which were 18 in number in 1945. Among this number are all those cities classed as "okrug" cities in 1926, plus seven cities in the western oblasts; Baranovichi, Brest, Vileika, Grodno, Lida, Molodechno, and Pinsk.

362 185 These seven cities were not included in the 1939 census, when the total urban population of Byelorussia was determined as nearly 1.4 million persons. Assuming that the urban centres of Byelorussia merely recover their pre-war population, and if the urban residents of western Byelorussia be included, the per capita urban housing space available in 1950 will certainly be much less than 9 square metres, since at that rate 8.2 million square metres could supply only about 900,000 occupants. The actual per person rate of urban housing space in 1950 is more likely to be near the 1932-33 rate if planned targets of reconstruction are achieved.

727 In the rural areas of the B.S.S.R., shelter demolition amounted to 400,000 dwellings of collective farmers, and an indeterminate number of individual peasant homes. In the western oblasts, as has already been noted, the great majority of farmers are not yet in collectives. In a single oblast, Molodechno, 16,000 peasant farms were laid waste. In Grodno oblast, where 117,000 civilians were slain by the Germans, demolition of homes was on a equal, if not greater scale. Thousands of individual peasant homes were also destroyed in other oblasts. A reported total of 1.2 million buildings of all kinds, houses, barns, sheds, offices, were destroyed in the rural areas. As at October 1946, 235,000 dwellings had been restored in the villages, providing shelter for 1.5 million people who were then able to move out of temporary shelters, mostly dugouts and caves. On the whole, progress in the restoration of shelter seems to be more rapid in the villages than in the cities.

Supplementary Aid from the U.S.S.R.

727 362 On December 31, 1946, the Byelorussian Council of Ministers published in "Sovietskaya Byelorussia" a statement that at its request the Council of Ministers of the U.S.S.R. had adopted a decree providing for assistance in the restoration of raions of the B.S.S.R. which had especially suffered from the occupation.

Under the terms of the decree, 27 million roubles have been granted by the U.S.S.R. for expenditure on 2,000 dwelling houses to be constructed in the areas of Byelorussia most devastated by the war. Built at state expense, these houses are to provide shelter for the most needy: families of war invalids, and of fighters (both army and partisan) killed in the war. The total fund is allocated for distribution among 38 districts or raions which are all situated in the eastern and central oblasts of the Republic. Vitebsk, Polotsk, Gomel, Mogilev, Minsk, Bobruisk, and Polessia oblasts are to benefit by the grant.

IV - UNRRA ASSISTANCE

648 In the original agreement between UNRRA and the Byelorussian Government was a provision that "within the limits of its resources" the Administration would strive to procure and deliver the full programme of 61 million U.S. dollars' worth of relief supplies for Byelorussia before July 1, 1946. In May 1946, however, when it became clear that the difficult world supply and transport situation would require at least an additional six months for the completion of deliveries, the UNRRA-Byelorussian agreement was extended to the end of the year. Even at the end of January 1947, the programme was not entirely completed as the following table shows.

TABLE XII

UNRRA Programme of Supplies for Byelorussia, Compared with Shipments to January 31, 1947

	Programme (U.S. dollars)	Shipments to January 31, 1947 (U.S. dollars)	(gross long tons)
Food	29,710,000	27,918,000	94,660
Clothing, textiles, footwear	7,015,000	7,009,000	5,346
Medical and sanitation	1,002,000	699,000	163
Agricultural rehabilitation	5,022,000	4,416,000	6,680
Industrial rehabilitation	17,351,000	10,181,000	14,495
Totals	60,700,000	50,223,000	121,344

Source: UNRRA Headquarters, Washington.

Food

In almost every month of 1946, food supplies made up the bulk of UNRRA's shipments to the B.S.S.R. As at the end of January they represented 78 per cent. of the tonnage and 55 per cent. of the value of all shipments. Largest items were (by volume) surplus army rations (36,000 tons up to January 31); 23,000 tons of fish, meat, and meat products, including a popular canned meat mixture known as tushonka; nearly 20,000 tons of dairy products, fats, oils, and soap; and 10,598 tons of pulses. A small amount of grain, soups, and beverages made up the remainder. It will be noted that no sugar, fruits, vegetables, or animal food were included in the UNRRA shipments.

Early observations by UNRRA Mission members confirmed that all food supplies were being equitably distributed by the Byelorussian Government

648 to the people in greatest need. Throughout the republic in ration stores, children's homes, hospitals, and rural communities, UNRRA food furnished the greater part of the Byelorussian diet in 1946, apart from domestically produced cereals and bread.

Clothing

511 In June 1946 the UNRRA Mission described the urgent need of the Byelorussians for clothing in these words: "The need for clothing is obviously acute. Most people are wearing old, patched up, and ragged clothes. At least half the urban residents seen on the streets and considerably more rural people are going barefoot. Those who have shoes to wear endeavour as much as possible to economize on shoe leather, and it is a common sight to see people walk barefoot where the road or street is smooth, meanwhile carrying their shoes slung over the shoulder ready for use when the road gets rough and rocky. At three factories visited, about half the workers were barefoot, and the remainder were wearing chiefly canvas shoes in poor condition...At the children's homes visited, the children as a rule were sleeping two in a single bed, narrow army-style cots, because of the shortage of blankets and bed linen."

648 The following table of clothing shipments to January 31, 1947, shows that finished footwear and shoe leather, and raw wool and woollen textiles formed a large part of the clothing programme for the U.S.S.R.

TABLE XIII

UNRRA Shipments of Clothing to Byelorussia up to January 31, 1947

	Thousand U.S. dollars	Gross long tons
Finished clothing	368	222
Blankets and comforters	252	139
Cotton textiles	278	154
Woollen textiles	1,288	524
Raw wool	1,134	1,244
Footwear	2,446	1,688
Upper leather	380	173
Sole leather	558	773
Miscellaneous textiles	80	58
Miscellaneous footwear	163	366
Unclassified	62	-
Totals	7,009	5,346

Source: UNRRA Headquarters, Washington.

To certain classes of priority consumers for example, war orphans in children's homes, widowed mothers, war invalids, and factory workers,

648 UNRRA clothing and contributed clothing are distributed free. The local soviet in each instance prepares a list of persons eligible to receive such clothing. Otherwise, textiles and shoe leather supplied to Byelorussia under the UNRRA programme are converted into clothing and shoes at local co-operatives, or artels, which perform an important role in the production of consumers' goods in the Republic.

474 295 Typical of the producer co-operatives engaged in processing UNRRA-supplied textiles in the Novy Put Clothing Artel in Minsk which UNRRA Mission observers visited in November 1946. At this artel, garments were being made for war orphans cared for in children's homes. The finished garments were then distributed free of charge to the children, the government paying the artel for the cost of manufacture only.

Orders for the manufacture of clothing at this artel can be placed by organizations or by individuals; and as a general rule, the customer supplies his own materials and pays the artel only the established production cost. On orders placed by individuals, the production prices are, for a child's winter coat, 75 roubles,[1] for a woman's winter coat, 275 roubles, and for a man's winter coat, 250 roubles. Men's jackets are manufactured for 85 roubles, and trousers, for 45. Orders placed by organizations or wholesale outlets receive a 20 per cent. reduction on this scale.

The artel is organized on a co-operative profit-sharing basis. Its members are the workers employed in its shops and offices. In addition to their share in the artel's annual income, the member-workers are also paid regular wages for work performed. The monthly earnings of the employees in this artel were said to average 500 roubles. Earnings as high as 2,000 roubles a month were cited for cutters, but the majority of skilled workers earn from 600 to 1,200 roubles montly.

The artel "Novy Put" was first organized in 1928, during the first Five Year Plan. Before the German invasion in 1941, it had a membership of 400 workers, and in addition to the main establishment, it had four branches in various districts of Minsk. The membership, composed largely of Jews, suffered a very high casualty rate during the war; 90 per cent. were said to have perished at the hand of the Germans. In July 1944, shortly after the liberation of Minsk, the artel was reorganized; and it has been steadily growing both in membership and in output. By July 1, 1946, it had 110 workers.

The shoe artels are organized along the same general pattern as the clothing artels. In November 1946 the Red Shoemaker artel in Minsk was turning out a thousand pairs of workers' shoes and three thousand pairs of children's shoes per month.[2] The present membership

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1 5.40 roubles equal one U.S. dollar; 21.36 roubles equal one pound sterling.

2 UNRRA Mission to Byelorussia, Minsk.

295 is 70 workers, who are also share-holders, receiving 20 per cent. of
474 the annual income in addition to regular wages for work performed.

Before the war the "Red Shoemaker" artel was situated in a different part of the city. The production process was then entirely mechanized, and the membership consisted of 300 workers. The plant was demolished by the Germans during the war; and the present artel was organized in 1945 when five pre-war members returned to Minsk, following the liberation. At present there is practically no machinery in the artel, and shoes are being turned out by hand.

Medical Supplies: General Health

727 In relation to the vast destruction of Byelorussian medical facilities during the war, the UNRRA medical programme of just over one million dollars is a drop in a bucket. According to official Soviet estimates, the Germans in Byelorussia "ruined and plundered 1,136 hospitals, clinics, and dispensaries," which represented 75 per cent. of all hospitals and almost 100 per cent. of the medical supplies and equipment of the Republic. The damage has been calculated at 600 million roubles (about 120 million dollars).

164 Byelorussian officials today say that the general health of the population is below pre-war standards; but there are no alarming epidemics. Infant mortality is higher than in 1940; and tuberculosis, which increased markedly during the war, is still a serious problem, especially among returned war prisoners, partisans, and former "slave labourers". Typhus, which flared up during the German occupation, still occurs sporadically; and malaria, which spread rapidly during the war when no treatment was available, is still widely prevalent, but is being gradually reduced by the restoration of swamp drainage and mosquito control projects.

146 The most general problem is perhaps malnutrition; and because of the food shortages, scurvy, rickets, and anaemia are prevalent. Children are small for their age; and the adult population, as might be expected in the absence of adequate food, clothing, and shelter, is not in optimum health.

UNRRA Shipments

648 Up to January 31, 1947, nearly 70 per cent. of the UNRRA medical
742 programme for Byelorussia had been fulfilled; 163 gross long tons of drugs and equipment had been shipped. The largest single item of the medical programme is a penicillin plant, parts of which began to arrive in the U.S.S.R. in December 1946. In connection with the plant, the Byelorussian Government has designated a penicillin trainee to study penicillin production in Canada. A specialist hired by UNRRA is to aid in assembling the plant and in training other Byelorussian technicians in the production of the drug. The Byelorussian Government has expressed interest in using the same plant for the production of streptomycin.

648 742 Apart from the penicillin plant, other big items in the UNRRA medical programme include electrocardiographs, X-ray machines and film, and artificial limb manufacturing equipment. Drug requirements have involved the procurement of quinine and, as a substitute, atabrine. By the end of January 1947, slightly less than one metric ton of atabrine had been shipped.

743 648 Not the least of UNRRA's contribution to Byelorussian health has been the soap supplies furnished. In 1946 the only soap available in the hospitals and sanitoria (and this means generally the only soap available anywhere), came from UNRRA sources. This was also true of a large part of the diet of patients, which came from UNRRA food supplies; and of blankets and bedding, which were distributed to hospitals and children's homes.

Still among the urgent requirements in Byelorussian hospitals are beds and bedding, laboratory equipment - including more X-ray machines, microscopes, stains and medea, drugs, and lamps - furniture, kitchen equipment, food, and soap.

Agricultural Rehabilitation Supplies

648 241 UNRRA agricultural rehabilitation supplies began to arrive in the B.S.S.R. in February 1946 and consisted almost entirely of seeds. At the end of July the Byelorussian Government acknowledged receipt of 5,300 tons of vegetable and other seeds, which were estimated to be sufficient for planting from half a million to 600,000 hectares; and since favourable weather permitted late sowing, less than a thousand tons had to be held over for use in 1947. On all the farms visited by the UNRRA Mission to Byelorussia, the vegetable, clover, vetch, timothy and other grass crops had been started fron UNRRA seed.

Besides seeds - an important contribution toward increased food supplies - UNRRA has shipped fishing equipment, food processing equipment, and farm machinery - chiefly tractors. Deliveries of the latter, however, were heartbreakingly slow; and it was only in December 1946 that the first 221 UNRRA tractors arrived. The difficulty of procuring tractors has been one of the greatest obstacles to farm recovery in Byelorussia. The Mission estimated that had UNRRA tractors been available before August 1946, grain cultivation and production would have increased by 500 hectares and 500 tons for each tractor delivered.

Altogether, UNRRA plans to furnish over 800 tractors to the B.S.S.R.

648 Industrial Rehabilitation Supplies

Shipments of industrial supplies up to January 31, 1947, amounted to 14,495 gross long tons valued at 10,081,000 dollars. Largest items were public utilities equipment (power generators, pipe for gas and water mains, etc.) and raw materials, chemicals and engineering stores. The following table shows the shipments by value as well as by tonnage.

TABLE XIV

UNRRA Shipments of Industrial Rehabilitation Supplies to Byelorussia up to January 31, 1947

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	Thousand U.S. dollars	Gross long tons
Transport and telecommunication	206	389
Public utilities	4,215	5,995
Building repair equipment	1,869	1,888
Mining and quarrying equipment	473	600
Machine repair equipment	811	274
Miscellaneous consumer goods	79	25
Materials, chemicals, engineering stores	2,433	5,173
Unclassified	95	151
Totals	10,181	14,495

Source: UNRRA Headquarters, Washington.

The first of these supplies arrived in Byelorussia during February and March 1946, and consisted of 3,000 tons of metals, tarpaulin, and rubber. A number of small locomotives for use in the peat and lumbering industries also arrived during the early months, as well as nine power stations and some engineering equipment, which were received in the second quarter of 1946. These first power stations have been followed by others; and by the end of October last year, 30 units with a total capacity of 8,400 kilowatts had been received. Altogether, UNRRA planned to furnish electric generating capacity of 18,000 kilowatts in 65 units, ranging from small 15 kilowatt army surplus generator sets to two 2,500 kilowatt steam power stations.

Protocol Supplies

A large part of the industrial rehabilitation programme for Byelorussia has consisted of so-called "protocol" supplies - that is, certain items of industrial machinery and equipment which the United Kingdom, in a previous trande agreement, had contracted to furnish to the Soviet Union. After UNRRA assumed responsibility in the Ukraine and Byelorussia, negotiations commenced for the transfer of this equipment through UNRRA. About the middle of 1946 it was concluded that UNRRA would take over and deliver these "protocol" supplies as part of the industrial rehabilitation programme for these two Republics. Similarly, UNRRA became financially responsible for these protocol supplies which had already been delivered by the United Kingdom to Byelorussia and the Ukraine.

648 By March 1, 1947, protocol supplies already dispatched to the B.S.S.R. amounted to over 3,881,000 dollars, and remaining shipments, to 132,400 dollars. Included in these supplies are power stations, pumps, telephone equipment, cranes and hoists, and electrical equipment.

U.S. Army Surplus Equipment (Surprop)

A second large share of Byelorussia's industrial equipment was acquired by UNRRA from U.S. Army Surpluses (Surprop) in Europe and the United Kingdom. The most important part of the equipment was approximately a million dollars' worth of heavy construction machinery selected from two depots in the United Kingdom, which UNRRA had purchased in their entirety. It was intended to use this equipment in clearing up the rubble and otherwise assisting the reconstruction of Byelorussian cities. The first shipments of surprop supplies for Byelorussia arrived in August 1946, and consisted of 45 two-and-a-half-ton trucks shipped from Marseilles. The government informed the UNRRA Mission that only eight of the 45 trucks were in good operating order; the rest were in very poor condition, and lacked essential parts. Inspection of the trucks by the Mission industrail specialist verified this report.

Inspection of further shipments which arrived in September revealed that they were in no better condition; and because technical manuals and spare parts were lacking, local repairs proved almost impossible. The surprop situation has since been made easier by the procurement of technical manuals from one of the depots in the United Kingdom. Later shipments have been inspected prior to loading, and the procurement of necessary spare parts initiated in the United States.

Distribution of UNRRA Supplies

UNRRA supplies for Byelorussia are handed over to the government at the port of entry, and the government is then responsible for arranging distribution. Like most other countries receiving UNRRA help, the Byelorussian Government has established a special organization to supervise the reception, warehousing, and distribution of all UNRRA goods received. Headed by Mr. Ivan S. Bylinsky, the Administration of UNRRA Supplies works in close liaison with the various Ministries of the Byelorussian Government and with the UNRRA Mission.

Most UNRRA shipments for both the Ukraine and Byelorussia have arrived mainly through the port of Odessa; and since early 1946 an UNRRA officer has been stationed there to handle problems connected with delivery. Before an UNRRA shipment comes in, the authorities at Odessa are notified of the ship's name, its expected time of arrival, and the nature of the cargo. As soon as possible after the ship lands, discharging of cargo begins. Stevedoring labour is supplied by the Port Commander's service organization, Inflot", which also furnishes checkers to work in the ship's hold and on the docks, counting the supplies and reporting any damaged-goods. As the cargo is unloaded, perishable items are placed in warehouses on the docks, and seeds in

648 a warehouse in the suburbs of Odessa. Packaged goods, such as canned meat, army rations, and juices, are piled on the dock at shipside and finally into freight cars.

Directives for the distribution of the supplies are issued by the UNRRA Supplies Administration in accordance with a general plan embracing the whole supply programme. As soon as the government learns of the prospective arrival of the ship, specific directions are given, so that immediately upon the loading of the freight cars, the goods start off to their ultimate destinations.

Many of the items - such as metals and contributed clothing, which require processing or sorting - are concentrated in Minsk before final disposition. Since at present Byelorussia has no facilities for processing certain raw materials, these are sent to factories in other parts of the U.S.S.R. under contracts which provide for the return to Byelorussia of finished products such as transmission cables, trolley wires, babbitt bearings, etc. The same is true with respect to some of the shipments of raw wool, which were sent to mills in Moscow or Ivanov to be woven into cloth.

In every instance, the supplies are distributed to the neediest sections of the Republic, either free of charge, or by sale to ration card holders. UNRRA food supplies, for example, are distributed in four ways: (a) sales to the general public through government ration stores; (b) sales to certain categories of consumers through special outlets, including stores attached to factories for factory workers, and special stores for pregnant women, nursing mothers, and invalids; (c) factory cafeterias where workers may purchase low-cost meals; and (d) free distribution through hospitals, children's homes, and local village soviets in rural areas most heavily devastated by the war.

In 1946 somewhat less than half the UNRRA foodstuffs were distributed free to hospitals, schools, invalids' homes, etc., and the rest was sold through ration stores. UNRRA clothing is sold through retail outlets, or in factory stores; and contributed clothing is distributed free to hospitals, schools, and other priority consumers. Medical supplies are transferred gratis to hospitals and invalids' homes. Industrial and agricultural supplies, if capital equipment, are distributed free to collectives and other organizations; and if consumable supplies, such as metals and other raw materials, are sold. Thus industries buy the raw materials, but receive the use of locomotives and generators free of charge.

In rural localities, food and consumer goods are distributed through the local Salpo (rural consumers' co-operative society). In every rural raion soviet (which may embrace a dozen or more collective farm villages), there is a Salpo distributing agency, the management of which is elected by the local consumer shareholders. In the sections which had suffered greatest destruction, collective farms received UNRRA supplies - mostly seeds and army rations - free through the local Salpo. About half the more than 5,000 tons of UNRRA-supplied seeds were distributed free to Byelorussian farms.

Prices and Wages

434 Detailed information on food rations in Byelorussia is not available, but they are believed to be similar to those in the Ukrainian S.S.R.[1]

435 Prices are controlled by the government and price levels vary
448 with the type of market outlet rather than with the type of commodity. In the government ration stores prices are low. In all the main cities, however, there are also one or two special stores, so called "gastronomes", (which are also government operated); these sell unrationed goods at relatively high prices. Their stock consists in large part of luxury items (such as smoked salmon) but some of their commodities are the same as or comparable to those sold in the ration stores. Individuals may therefore supplement their rations of various commodities by purchases at the gastronomes if they are able and willing to pay the price. While the ration stores sold UNRRA food,[2] the entire stock of the gastronomes comes from Byelorussian or Soviet Union sources.

In addition to these stores, and to the special stores serving factory workers and those supplying extra rations at low prices to war invalids and expectant and nursing mothers, there are public markets in the principal cities. Here country people come to sell the allowed quota of their produce and second-hand goods are bought and sold. Prices resemble those in the gastronomes.

435 The difference in prices between the ration stores and the gastronomes in the summer of 1946 is illustrated in the following table.

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1 See Operational Analysis Paper No. 39, Economic Rehabilitation in the Ukraine.

2 In the late spring and summer of 1946 the foodstuffs (with the exception of bread and potatoes) sold in these shops was to a very great extent of UNRRA origin. Some estimates gave the UNRRA contribution as 70 per cent. of the turnover, but this figure has not been confirmed by the Byelorussian Government. Later the UNRRA percentage gradually decreased as the supply from Soviet sources increased.

TABLE XV

435 Byelorussia: Prices in Ration Stores and Gastronomes, June 1946
(in roubles)

Commodity	Ration stores Unit	Ration stores Price	Gastronomes Unit	Gastronomes Price
Cheddar cheese	kilogram	29.50[1]	kilogram	280.00
Sugar, granulated	"	5.00	"	120.00
Evaporated milk	14½ ounce can	2.60[1]	small can	70.00
Canned meat	" " "	17.50[1]	" "	55.00
Tea	100 grams	5.00	100 grams	22.50

1 UNRRA supplies

Source: UNRRA Mission to Byelorussia, Minsk.

465 435 In the same month (June 1946) the UNRRA Mission estimated the average monthly earnings of a semi-skilled urban worker to be approximately 500 roubles, while the average for skilled workers was some 300 roubles higher. Thus the purchasing power of the average worker in terms of free market prices was low; a kilogram of cheese would cost him half a month's earnings. However, many factories operate low-priced cafeterias and factory workers receive priority for clothing and housing. Those who exceed their production quota receive further privileges.

465 The following table gives the average monthly earnings in June 1946 of four Byelorussian factories as reported to UNRRA Mission observers by the factories' managers.

TABLE XVI

465 Average Monthly Earnings in Four Byelorussian Factories, June 1946
(in roubles)

Radio factory, Minsk	
Most skilful workers	1,500
Ordinary workers	800 to 850
Beginners	150 to 200
Match and plywood factory, Borisov	
Honour brigade	700
Average for all workers	500 to 600
Lowest paid workers	200 to 300
Garment factory, Vitebsk	
One cutter, exceptionally skilled	2,000
Cutters	1,200
Most skilful operators	600
Sewing machine operators	200 to 500
Brick factory, Polotsk	
Best workers	400 to 450
All workers	300
Lowest paid workers	250

Source: UNRRA Mission to Byelorussia, Minsk.

435 In September 1946 a decree of the Government of the U.S.S.R. announced an increase in the price of rationed goods and a reduction in commercial prices (such as those charged in restaurants). This measure was designed to facilitate the abolition at a later date of the rationing system and the establishment of one unified state price for all goods.

465 In order that the increase of ration prices should not fall too heavily on the lower income groups, workers earning less than 900 roubles a month were simultaneously granted a wage increase on a sliding scale, those earning less receiving a greater increase.[1]

The latest report received lists the following average wages paid in the U.S.S.R.

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1 Increases were as follows: 110 roubles a month for those earning up to 300 roubles; 100 for those earning up to 500; 90 for those earning up to 700; 80 for those earning up to 900.

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TABLE XVII

Average Monthly Earnings in Byelorussia, May 1947
(in roubles)

Government minister	3,000
Office manager)	1,200 to 1,500
Shop supervisor)	
Skilled cutter in garment factory	1,200 to 2,000
Chief cook	1,000
Assistant Cook	500
Chauffeur	700 to 800
Civil servant in government office	700 to 800
Skilled machine operator in radio factory) match and plywood factory) garment factory) co-operative shoe artel) co-operative clothing factory)	700 to 800
Waitress) Charwoman)	350
Factory apprentice (beginner)	200

Source: UNRRA Mission to Byelorussia, Minsk.

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Proceeds of Sale of UNRRA Supplies

When UNRRA supplies are sold, the Byelorussian Government, in accordance with the terms of the UNRRA agreement, uses the proceeds for further relief and rehabilitation projects within the Republic. From December 1945 to the end of 1946, the net proceeds of sales (after deduction of distribution costs) amounted to 656,658,000 roubles, which were expended for health and welfare services; the rehabilitation of agriculture, forestry, and fisheries; industry and utilities; and on social insurance.

V OUTLOOK IN 1947

146 Although there has been no starvation in the B.S.S.R., almost everyone is undernourished. There is still an acute shortage of fats and oils, meat, milk, and sugar. Such of these foods as were available in 1946 were chiefly from UNRRA; and now that UNRRA food shipments have ceased, there will undoubtedly be privation. The shortage of fats and oils will continue until domestic livestock herds are fattened and replenished; in the meantime, only external help will alleviate the scarcity.

262 Much depends on a good harvest this year. Last December the B.S.S.R. Minister of Agriculture, Mr. Krupenya, in a conference with the UNRRA Mission, stressed the importance of increased food production in 1947 - more seeds, more tractors, more farm workers. A part of the interview is reproduced below. Mr. Waller is Chief of the UNRRA Mission to Byelorussia.

Mr. Waller: "In our observations we have seen villages where there was such devastation that the people...had to be helped with food this year. Will the same need exist next year?"

Mr. Krupenya: "In some areas it will not be possible to cover the local needs from the produce of the local farms. The population of extremely devastated areas will stand in need of assistance...The government is making plans to assist them."

Mr. Waller: "What per cent. or number of the village people will need assistance?"

Mr. Krupenya: "It is hard to say exactly, but at least ten to fifteen per cent. of the rural population in Byelorussia..."

Mr. Waller: "Will there be starvation (in the B.S.S.R.) if no aid from outside is forthcoming?"

Mr. Krupenya: "Conditions will be difficult, and aid from outside the Republic will be necessary...Every effort will be made to keep the people from starving."

Mr. Waller: "If no other aid is received from outside, and without further UNRRA assistance, will there be any danger of starvation?"

262 Mr. Krupenya: "The need is so great that some aid will be given...by other Soviet Republics. The increased work on restoration planned for next year will impose additional burdens..." He then added: "The situation is hard after the war. The help received from UNRRA has been great, but after such devastation as was inflicted on Byelorussia, one cannot expect to have appreciable results in one or two years. The time is too short. The results of rehabilitation work done now will be felt later. The situation is still grave this year, and especially so in the villages which suffered most. It cannot be said that there will not be malnutrition. Certain people will not have enough food. There will still be people who do not get enough to eat."

APPENDIX

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